

Wildfire-Resistant Roofing Can Save Your Home

Read About the Best Roofing Material to Use!
Julie Rochman, Environment & Safety Committee

Here in Sandia Heights, we are privileged to be surrounded by beautiful landscapes and commanding views of both Albuquerque and the mountains. That is because we live in what is known as the “wildland-urban interface” (WUI), where development meets forested land and other open space. However, there also is a downside to living in the WUI: a very real risk of wildfire.

Fortunately, there are things every homeowner can and should do to prevent their house and possessions from being destroyed by wildfire. Of course, some fire risk reduction actions are easier and less expensive than others. I would like to focus on one of the more expensive, but also most effective ways: installing a fire-resistant roof. The roof is critical; it is any home’s first line of defense against embers and firebrands (larger pieces of burning wood) which the wind can carry as far as a few miles from the perimeter of a wildfire.

Recently, we needed to fix our persistently leaky flat TPO (thermoplastic polyolefin) roof. I should note that, prior to retiring and for over a decade, I led a property insurance industry research organization that worked closely with roofing companies. So, as long as we had to put a new cover on our roof, we decided to select a membrane that provides superior fire protection. In this case, we went with PVC (polyvinyl chloride) roofing.

If you are re-roofing, please ask your roofer about what is known as a “Class A” fire-rated roof. Generally, roofing material fire-related ratings are either Class A, Class B, or Class C. Class A is the most fire resistant. Class A roof coverings include concrete or clay tiles, asphalt shingles and standing seam metal roofs. As a result, all of these roof covers are excellent choices for Sandia Heights homes. For homes with flat roofs, there are important differences among membranes used as roof cover. For example, while PVC roofing is rated Class A, the more commonly used TPO roofing is rated Class B.

PVC membrane is the most fire-retardant single-ply roofing membrane, and a much better choice for Sandia Heights homes than TPO or another rubberized roofing membrane called EPDM (ethylene propylene diene terpolymer). PVC is extra protective because: 1) thermoplastic PVC is the only naturally fire-resistant polymer among all roofing plastics, and 2) PVC manufacturers deliberately add more fire retardants to the product during formulation. These factors make PVC roofing slow to catch fire and able to self-extinguish. PVC is no more difficult to install or maintain than TPO. Also, in case you are wondering, the cost difference between TPO and PVC roofing is only about 43 cents per square foot. So, for a 3,000 sq ft roof, PVC would cost \$1,290 more than TPO. A worthwhile investment to protect your home from fire.

To prove this point, here is a short video from Southwest Research institute’s Fire Technology Department: <https://www.youtube.com/watch?v=AgrRBUtuf8>

While the EPDM and TPO burn and melt pretty quickly, the PVC self-extinguishes. Impressive. And worth an extra 43¢/sq ft!