



# Protecting Your Property From Fire

---

## FEDERAL EMERGENCY MANAGEMENT AGENCY

### ARE YOU AT RISK?

If you aren't sure whether your house is at risk from wildfires, check with your local fire marshal, building official, city engineer, or planning and zoning administrator. They can tell you whether you are in a wildfire hazard area. Also, they usually can tell you how to protect yourself and your house and property from wildfires.

### WHAT YOU CAN DO

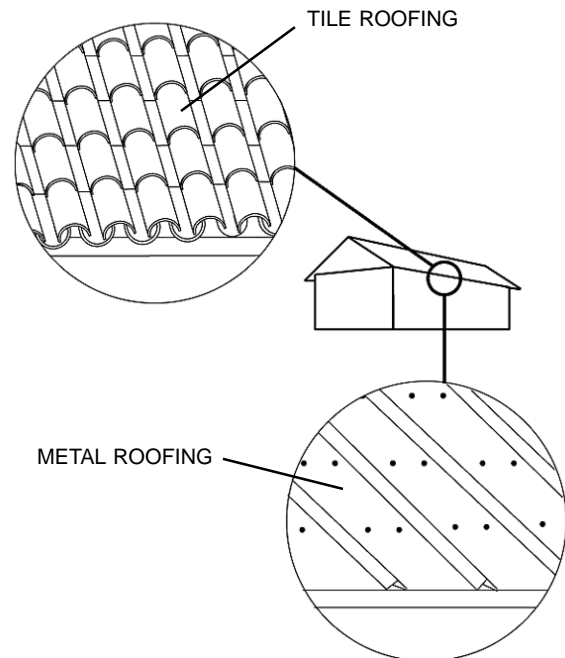
Fire protection can involve a variety of changes to your house and property – changes that can vary in complexity and cost. You may be able to make some types of changes yourself. But complicated or large-scale changes and those that affect the structure of your house or its electrical wiring and plumbing should be carried out only by a professional contractor licensed to work in your state, county, or city. One example of fire protection is replacing flammable roofing materials with fire-resistant materials. This is something that most homeowners would probably hire a contractor to do.

---

## REPLACE ROOFING WITH FIRE-RESISTANT MATERIALS

Some roofing materials are less resistant to fire than others. When wildfires and brush fires spread to houses, it is often because burning branches, leaves, and other debris buoyed by the heated air and carried by the wind fall on roofs. If the roof of your house is covered with a product that does not have a Class A fire resistance rating, such as untreated wood shakes or organic-reinforced asphalt shingles, you should consider replacing them with Class A fire-resistant materials.

As shown in the figure, you can replace your existing roofing materials with slate, tile, metal roofing, or fiberglass-reinforced asphalt shingles. Replacing roofing materials is difficult and dangerous work. Unless you are skilled in roofing and have all the necessary tools and equipment, you will probably want to hire a roofing contractor to do the work. Also, a roofing contractor can advise you on the relative advantages and disadvantages of various fire-resistant roofing materials.



## Replace Roofing with Fire-Resistant Materials

### TIPS

Keep these points in mind if you plan to have your existing roofing materials replaced:

- ✓ Tile, metal, and slate are more expensive roofing materials, but if you need to replace your roofing anyway, it may be worthwhile to pay a little more for the added protection these materials provide.
- ✓ Slate and tile can be much heavier than wood or asphalt shingles. If you are considering switching to one of these heavier coverings, you should hire an engineer to determine whether the framing of your roof is strong enough to support them.

### ESTIMATED COST

If you hire a contractor to replace your existing roof covering, you can expect to pay about \$4 per square foot of roof area for tile or metal roofing and about \$7 per square foot of roof area for slate. For example, a house measuring 60 feet by 30 feet will have about 1,800 square feet of roof area. So for this house, tile or metal roofing would cost about \$7,200 and slate would cost about \$12,600.

### OTHER SOURCES OF INFORMATION

"Five Hot Tips for Homeowners on the Edge," by Herbert McLean, in *American Forest*, Vol. 99, No. 5-6, 1993

*Guide to Landscaping for Fire Safety*, 2nd. Ed., University of California, 1992

"Firescaping: Ways To Keep Your House and Garden from Going up in Smoke," by Joan Boulton in *Horticulture, The Magazine of American Gardening*, Vol. 69, No. 8, 1991

*Protecting Residences from Wildfires: A Guide for Homeowners, Lawmakers, and Planners*, Technical Report No. 50, U.S. Department of Agriculture, 1981

*The NRCA Steep Roofing Manual*, National Roofing Contractors Association, 1996

To obtain copies of FEMA documents, call FEMA Publications at 1-800-480-2520. Information is also available on the World Wide Web at <http://www.fema.gov>.

Information is also available from the Technical Services Section of the National Roofing Contractors Association in Rosemont, IL, at (847) 299-9070.