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PRINT

Homeowner's Wildfire Mitigation Guide

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Roof Covering

The fire rating of roof coverings is determined for all materials used in code-compliant housing, and is classified as Class A, B, C, or *unrated*. Class A provides the best fire resistance, and therefore the best protection for your home. We recommend having a Class A fire-rated roof covering, but you should understand its limitations, particularly those related to edge-of-roof issues, since standard roof tests do not evaluate potential vulnerabilities at these locations.



At 12 in. by 12-in, the Class A brand is the largest one shown in this photo. The Class B brand is 6 in by 6 in. A and B brands consist of a three layer sandwich construction of 3/4 in. square sticks nailed together, with sticks in the middle later running perpendicular to the outside layers. The Class C brand is about the size of an ice cube.



Burning A brand on a roof deck



Flame-through to the underside of a roof deck. This roof covering failed, so as constructed, this is not a Class A roof.

Roof coverings can obtain a Class A rating based on the covering alone (called a *stand-alone* Class A) or based on the covering and underlying materials that provide additional fire protection (called an *assembly-rated* Class A). If you are unsure of the fire rating of your roof covering, the manufacturer of the roof covering can tell you. Often this information will be on the manufacturer's website. If you are unsure about the type of roof covering you have, you should check with a licensed roofing contractor. Your local building department may also be able to help.

Common *stand-alone* Class A roof coverings include:

1. Asphalt glass fiber composition (3-tab) shingles
2. Clay tiles
3. Concrete tiles
4. Slate



This asphalt composition roof covering is a stand-alone Class A.

Common *assembly-rated* Class A coverings include:

1. Aluminum (metal) roofs
2. Fire-retardant treated wood shakes (with Class B fire rating, approved by the California Office of the State Fire Marshal as a result of passing the required natural weathering test).
3. Some recycled rubber and or plastic composite materials.



This aluminum roof covering is an *assembly-rated* Class A. The underlying Type 72 capsheet (roll roofing) material provides additional protections, and is required for the Class A rating.



This fire retardant treated wood shake roof covering is an *assembly-rated* Class A roof. The underlying gypsum-glass fiber panel (DensDeck) material provides additional protection, and is required for the Class A rating. In this case, the fire retardant treated shake is a *stand-alone* Class B covering.

It can be difficult to determine if the fire rating of a given product has a *stand-alone* or *assembly-rated* rating, since a published Class A rating could refer to either. If you aren't sure, obtain a copy of the installation instructions for the roofing materials. If the installation instructions call for Dens-Deck, a Type 72 capsheet material, or other materials *in addition* to Type 15 or 30 roofing felt and structural sheathing (plywood or oriented strand board), you have an *assembly-rated* Class A covering.

For more information: [link to "What is a Fire Safe Roof?"](#)