



A White Roof Is a Cool Roof: How to Reduce Home Energy Use by 20%

Source: [greenUPGRADER](#)

By: Beth Buczynski

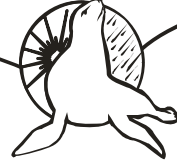


Think the only way to have a cool roof is to put solar panels on it? Think again.

Want to put something on your roof that saves energy and puts some money back in your pocket? Don't have a very good solar resource or the up-front capital for solar panels? Don't fret. Light-colored or white roofs, also known as "cool roofs", can reflect the sun's heat and emit absorbed radiation back into the atmosphere.

The roof literally stays cooler and reduces the amount of heat transferred to the building below, keeping the building a cooler and more constant temperature. In fact, studies have shown that a light-colored roof can [cut energy costs by as much as 20 percent](#).

If you live in an area of the world that experiences a lot of sunshine (in the U.S., that is Southwest in particular), and you find yourself cranking up the air conditioner just to get a few hours of relief, the benefits of a light-colored roof are particularly attractive. Added



benefits include prolonging the life of your air conditioning system and extending roof life. A roof that doesn't get as hot will last longer.

There are a range of [cool roof products](#) — and not all of them are necessarily white — some of which can be built right into your roof, and others that can be applied retroactively to work with your existing roofing materials to reduce the amount of sunlight absorbed. Among the most popular types of cool roofs are: *Roof Coatings/Paints* are applied directly onto the roof surface, or are applied at the factory prior to distribution; *metal roofing products*, which can be shaped to look like shingles, or shakes, or to fit unique curvatures, and come in darker “cool” colors with special additives that allow these dark colors to achieve significantly greater reflectance than previous versions of the same product; and *single-ply roofing*, which is a pre-fabricated sheet of rubber polymers that is laid down in a single layer over a low or steep-sloped roof.

The best thing about cool roofs is that they are affordable, and usually cost the same amount as other comparable roofing materials. For those products that cost slightly more, the difference can usually be quickly recovered in savings from reduced energy costs.



If you've been thinking about making some green upgrades to your home in the next year, it is important to understand your climate zone and the actual energy your home or building will save with a light-colored roof. Both the [Department of Energy](#) and the [EPA](#) offer cool roof calculators online that can give good estimates of how much energy you will save.

Also be sure to check if installing a cool roof might qualify you for a local, state, or federal tax rebate! Check out the CRRC's handy list of [rebate programs](#) listed by state and don't forget to ask your local utility company as well.

Photo Credits: dkdesignstudio.wordpress.com; U.S. Dept. of Energy