

Home Lifestyles

White roofs are a cool way to cut energy costs

Lighter-colored materials reflect more of the sun's energy and absorb less heat.

BY JOSH SALMAN | STORY UPDATED AT 4:01 AM ON SATURDAY, JUN. 6, 2009



JOHN PEMBERTON/The Times-Union
Kevin Songer, owner of MetroVerde roofing, stands on top of a white roof he installed. Although the idea of light-colored, or cool, roofs has been around for decades, they haven't yet caught on with consumers the way that solar panels and other sustainable solutions have.



The color white can inspire thoughts of snow on a cold winter day, marshmallows roasting over an open campfire or a flock of swans gracefully swimming in a Florida pond.

But now contractors want to add a new aspect to the color white: roofs. Yes, the hard material that sits atop buildings.

Something as simple as painting a roof white or choosing a lighter shingle in the next remodel can help reduce the effects of global warming and save hundreds of dollars, Jacksonville contractors said.

"At first we were laughing about it, but it really can save a lot of on your energy bill," said JEA spokeswoman Gerri Boyce.

Although the idea of light-colored roofs, or cool roofs, has been around for decades, they haven't captured the attention of consumers like solar panels and other sustainable solutions.

But the difference between those standard dark shingles and a cool roof can be night and day for a homeowner's wallet.

Gray roofs reflect 8 percent of the heat associated with sunlight. White shingle roofs reflect up to 34 percent. And metal and cement tile roofs can reflect up to 77 percent of the sun's energy, according to an April study by energy provider Florida Power and Light.

A white painted metal roof can save homeowners about \$130 annually on a 1,800-square-foot house, the study shows.

Cool roofs certified by Energy Star also qualify for a federal tax break equaling 30 percent of the roof's cost up to \$1,500. The average cool roof costs only about 5 percent to 10 percent more than a typical roof, varying by manufacturer, said Brian Pippin, JEA conservation coordinator.

"The bottom line is lower energy bills," Pippin said. "If you were going to mow your yard, you wouldn't go out in black shoes, black pants, a black sweatshirt and black hat. Nobody does that because black is known to absorb heat. It doesn't make sense that people don't realize the same holds true for your home."

Pippin thinks the reason these cool roofs haven't caught on like solar is that they're not as aesthetically pleasing, he said. As a result, many home-owners' associations don't allow them.

There's also concerns with white paint voiding many roof's warranties. And some paint can become harmful to the environment through run-offs.

White roofs also need routine cleaning.

"There's a lot of homeowners who want to do this and be energy efficient but get blocked because it doesn't look good from the street," Pippin said. "There's a cultural change that needs to take place."

One solution to avoiding the bright colors of cool roofs are Energy Star shingles.

These roofs come in all colors, including the standard dark gray, and still reflect the same amount of sunlight as a white roof said Mary Tappouni, founder and president of Breaking Ground Contracting, a contractor focused on sustainable solutions.

"There are a lot more options than simply choosing white," she said. "You see it all of the time in commercial building, and we recommend it to all of our residential customers. Cool roofs come in a range of colors that are still quite nice looking."

President Barack Obama's climate guru, Energy Secretary Steven Chu, recently was quoted in several newspapers as saying everyone painted roofs white (along with lightening the color of the roadways), it would be the equivalent of taking all of the cars in the world off the road for 11 years.

Still, the community isn't responding.

Jacksonville-based contractor Jack C. Wilson Roofing has had one call about cool roofs and hasn't installed any, ever, said Dana Conner, office manager.

Kevin Songer, founder and owner of MetroVerde Roofing, has had a little better luck. But that's because his company focuses solely on green solutions like cool roofs.

"A white roof is certainly a great roof to have," he said. "It's generally the right thing to do."

Songer said cool roofs are especially helpful because, unlike standard shingles, some aren't made from crude. The roofing industry is one of the largest consumers of oil.

And reducing this dependence of foreign petroleum can both help the economy and the environment, he said.

Songer said if everyone used cool roofs, it would also lower the city's average temperature by 10 to 15 degrees.

The price of these roofs are also beginning to decline with larger manufacturers like Firestone joining the trend. Replacing existing shingles with white thermoplastic polyolefin roofing on a 1,800-square-foot home costs about \$8,500, he said.

"I can't fathom why someone wouldn't want a white roof," Songer said. "As we move into the next 15 to 20 years, roofing is going to change. This is the future."

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TYPES OF COOL ROOFS

- White shingles
- Light ceramic tile
- Metal roofs
- Energy Star qualified asphalt shingles
- Single-ply white roofs

Source: JEA and Sustainable Roofing Solutions