



Press Release
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Immediate Release

SANEDI offers three tips for cooling your home this summer with a cool-coated roof

Over a matter of days, South Africa's winter chill has burned off with a very warm summer ahead. This will see a change in household requirements, from heating to cooling. "This should also bring about a change in energy usage," comments Denise Lundall, Project Officer Energy Efficiency Cool Surface at the South African National Energy Development Institute (SANEDI). "If people embrace low-tech cooling initiatives such as cool coatings, there is no need to battle high electricity bills from using air conditioners and fans this summer," she says.

Cool coatings involve the painting of a heat-reflective membrane onto one's roof, passively cooling the building with the absence of electrical technology, thus saving electricity. "The coating reflects heat and mitigates the need for fans or air-conditioners, making living conditions more comfortable. We have started applying this coating to roads and paving too, and have seen the incredible impact this can make in cooling down an urban area," says Lundall.

However, there are many cool coatings on the market that can be confusing for consumers. There are also additional elements that need to be considered when coating your roof. SANEDI encourages consumers to consider three important factors when pursuing a cool roof.

1. Ingredients

What makes a coating heat- and light-reflective is the presence of titanium dioxide (TiO₂). "Many commercially available roof paints claim to have cooling properties and charge a premium, but are in fact only a little better than regular roof paints," explains Lundall. The coating needs to have enough titanium dioxide to reach a Solar Reflective Index (SRI) level of 0,75 – or 75% solar reflectance. "Consumers must check the SRI of their coatings, and not accept anything below 65%, and look at a higher percentage if it is available."

2. Colour

"While darker greys and browns are becoming increasingly fashionable and favoured by consumers, the colour of your roof paint greatly impacts its SRI. White, light, and pastel colours are most effective at cooling your home. Darker colours may look nice, but they absorb heat and are sure to get you sweating," explains Lundall. "Consider using your dark paint for gutters and pipes, but keep your actual roof colour as light as possible."

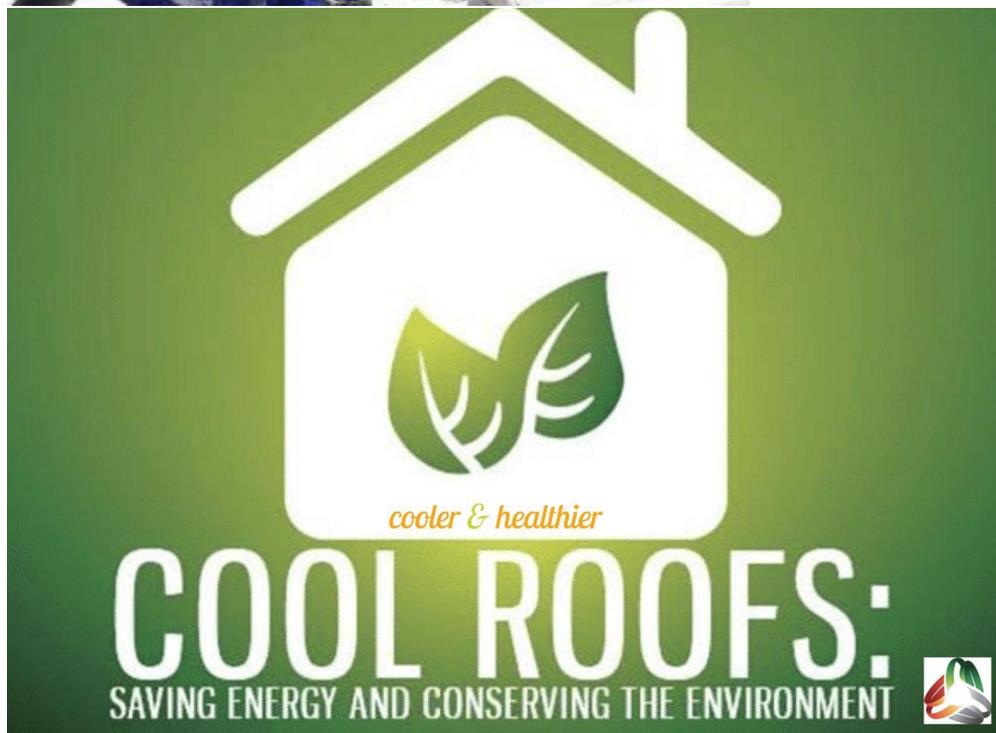
3. Surface

“Before you get painting, you must consider the material you are coating as well as its condition. For example, a corrugated iron roof requires different preparation to a tiled roof and may have rust that must be treated. Likewise, you must repair any roof leaks or broken tiles before getting started. Then, remember to prime your surface with the appropriate primer before applying your cool coating,” advises Lundall.

Cool coatings are an accessible, simple, and relatively cost-effective way to keep your home or office cool and help reduce energy consumption. “Climate change is a very real threat, and South Africa contributes a disproportionate amount of greenhouse gasses to the atmosphere. Something as simple as a cool-coated roof can help alleviate a huge amount of heat while also saving energy,” says Lundall.

SANEDI is underway with testing and standardising rating for labelling cool coatings to ensure that a regulated cool-coating product is available to consumers. The membrane offers added benefits beyond cooling, including longevity, ease of maintenance, being dust- and abrasion-resistant, and fire retardant.

Ends 539 words



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that contribute to youth empowerment, gender equity, environmental sustainability and the 4th Industrial Revolution, within the National Development Plan (NDP), through consultative, sustainable energy projects. For more information, go to www.sanedi.org.za.