STEP TOWARD TOWARDS SAVE EARTH AND UNDERSTANDING THE SOLAR REFLECTANCE INDEX



According to the Global Climate Risk Index for 2020, India is the fifth most vulnerable of 181 countries to the effects of climate change, with its poorest citizens being the most at risk. It is vital to build energy efficient livelihoods, sustainable housing and climate resilience capacities in communities to survive, adapt and progress in the face of climate risks without distress or loss of assets.

As inhabitants of Earth, we bear a collective responsibility to combat climate change and protect our planet for future generations. By embracing our responsibility to save Mother Earth, we can make a significant impact in mitigating climate change and protecting our planet. It requires a concerted effort from individuals, communities, businesses, and governments worldwide. Through sustainable practices, advocacy, and education, we can build a more resilient, equitable, and sustainable future for all. Ideal Colours & Paints start his initiative step by developing Cool Roof Paint brand name as ALFRESCO COOLRIDE.

The Necessity of Cool Roof Paint to Save Mother Earth

Cool roof paint, also known as reflective or solar-reflective paint, plays a crucial role in mitigating climate change and promoting environmental sustainability. By reflecting more sunlight and absorbing less heat than standard roofing materials, cool roof paint helps in reducing the urban heat island effect, where urban areas experience significantly higher temperatures than their rural surroundings.

Benefits:

- 1. **Energy Efficiency**: Cool roof paint reduces the need for air conditioning by keeping buildings cooler. This leads to lower energy consumption, decreasing greenhouse gas emissions from power plants.
- 2. Lower Urban Temperatures: By reflecting solar radiation, cool roofs can help lower overall temperatures in urban areas, reducing heat-related health issues and improving the quality of life.

- 3. Longevity of Roofing Materials: Reflective coatings can prolong the lifespan of roofing materials by reducing thermal expansion and contraction, leading to less waste and fewer resources needed for repairs and replacements.
- 4. **Mitigation of Climate Change**: Reduced energy consumption and lower urban temperatures contribute to the overall effort to combat climate change. By adopting cool roof technology, cities can decrease their carbon footprint and support global environmental goals.

Implementing cool roof paint is a simple yet effective strategy to enhance energy efficiency, improve urban living conditions, and contribute to the global fight against climate change.

IDEAL ALFRESCO COOLRIDE

The Product is tested and certified by leading NABL approved testing laboratory CEPT Research & Development Foundation, compliance Test Method ASTM 1980, BS EN 12898, EN 673 and EN 410. ALFRESCO COOLRIDE achieved result SR:0.787, TE: 0.935 and SRI value 99 Highest among all competitive product available in market. We can provide certificate copy upon request.



What is the Solar Reflectance Index?

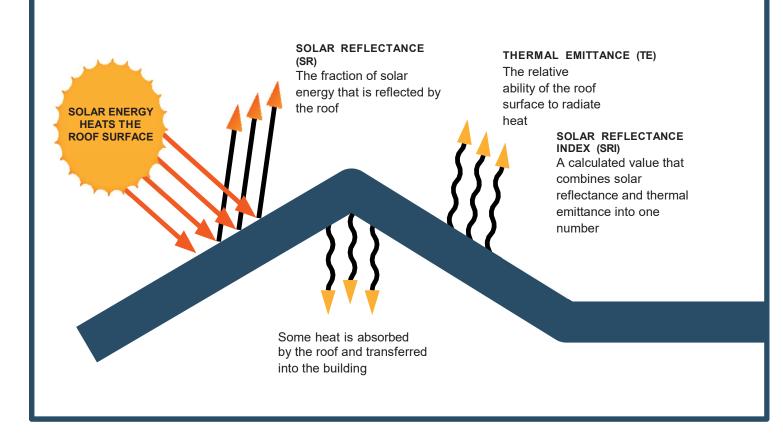
The Solar Reflectance Index (SRI) is an indicator of the ability of a roof surface to return solar energy to the atmosphere. Roofing material surfaces with a higher SRI will be cooler than surfaces with a lower SRI under the same solar energy exposure, especially on a sunny day. Using materials with higher SRI values can enhance building occupant comfort and reduce air conditioning use.

TAKE NOTE!

The Solar Reflectance Index is a calculated value that is **different** from a roof's measured Solar Reflectance.

HOW IS AN SRI VALUE DETERMINED?

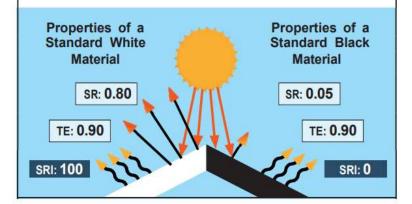
An SRI value is calculated using the roof surface's Solar Reflectance (SR) and Thermal Emittance (TE). The diagram below describes SR and TE, which are measured values that range from 0 to 1, with 1 being the most reflective or emissive.



Determining an SRI Value is a Two-Step Process:

The roofing material's SR and TE are used to calculate that material's surface temperature under conditions specified in Standard Practice ASTM E1980 (for more information about ASTM standards, visit astm.org). The CRRC-1 Roof Product Rating Program Manual contains additional requirements.

The SRI value for that material is determined using a formula that compares the calculated surface temperature with those of a standard white material and a standard black material under the same specified conditions.



WHAT MAKES THE SRI USEFUL?

SRI VALUES ...

- Enable comparison of different roofing products, regardless of the type of roofing material, by providing an indication of the material's relative ability to stay cool in the sun, reducing heat flow into the building.
- Condense two measured values into one whole number.
- Can be used to demonstrate compliance with some building codes even if the measured SR or TE does not comply on its own.

SRI values for most materials fall between 0 and 100, although values outside of that range are possible. After three years of outdoor weathering, approximately 98% of products in the Cool Roof Rating Council (CRRC) Rated Roof Products Directory (coolroofs.org/directory) have an SRI value between 0 and 100.

