



## **Roofing Solutions : Solar Reflective Roof Coating Systems**

Reprinted; Home Improvement Articles

By; Jon

Advances in white solar reflective elastomeric roof coating over the course of the past 15 years have resulted in a long-lasting roofing system that is also energy-efficient. These roof coatings offer three key benefits - sustainability, durability and energy efficient solar reflectivity. In combination, these three benefits provide homeowners with value, protection and reduced energy costs.

Reflective roof coatings act like mirrors, reflecting the sun's radiant energy back into space. When initially applied, solar reflective roof coatings can provide a solar reflectance of up to 80%, which means that only 20% of the sun's energy is being absorbed as heat.

Conventional built up asphalt roofing typically reflects only about 25% of sunlight. This is because it is typically covered with a gray mineral and a black substrate which allows considerable heat absorption.

The reflectivity of white elastomeric roof coatings can reduce the surface temperature when applied over flat built up asphalt roof surfaces. The reduction in roof temperature associated with white elastomeric roof coatings equate to lower cooling costs to homeowners.

In comparison to white elastomeric solar reflective roofing systems, the installation of built up asphalt roofs is an energy consuming process that results in a roof which has a relatively short service life of 8-10 years.

It is estimated that 7% to 10% of landfills are made up of roofing waste due to the fact that asphalt roofing requires frequent replacement.

With proper installation and maintenance, all that is required to extend the life of a white solar reflective roof coating is annual cleaning and an additional coating application as per the manufacturers recommendations.

As solar reflective roof coating systems only require supplemental coats to extend their lifespan once the initial system has been installed, they help reduce the amount of waste that goes to landfills associated with traditional roofing tear-off.