

Definitions:

Reflectivity:

Roof materials are significantly heated by sunlight (solar energy) more so than by surrounding ambient air temperature. A roof's ability to reflect that energy greatly reduces the amount of heat being transferred to a building's interior and likewise reduces energy costs for conditioning and cooling. A roof's ability to reflect solar energy is called its reflectivity. Reflectivity is reported as a decimal number less than one and represents the percentage of solar energy reflected off the roof.

Emissivity:

Recognizing that roof materials can't reflect all the solar energy and that they will be heated, it's important to look at a roof's ability to radiate back or emit absorbed energy back into its surroundings. A roof's ability to emit absorbed energy is called its emissivity. It also is reported as a decimal number less than one and represents the percentage of absorbed energy it will release to its surroundings.