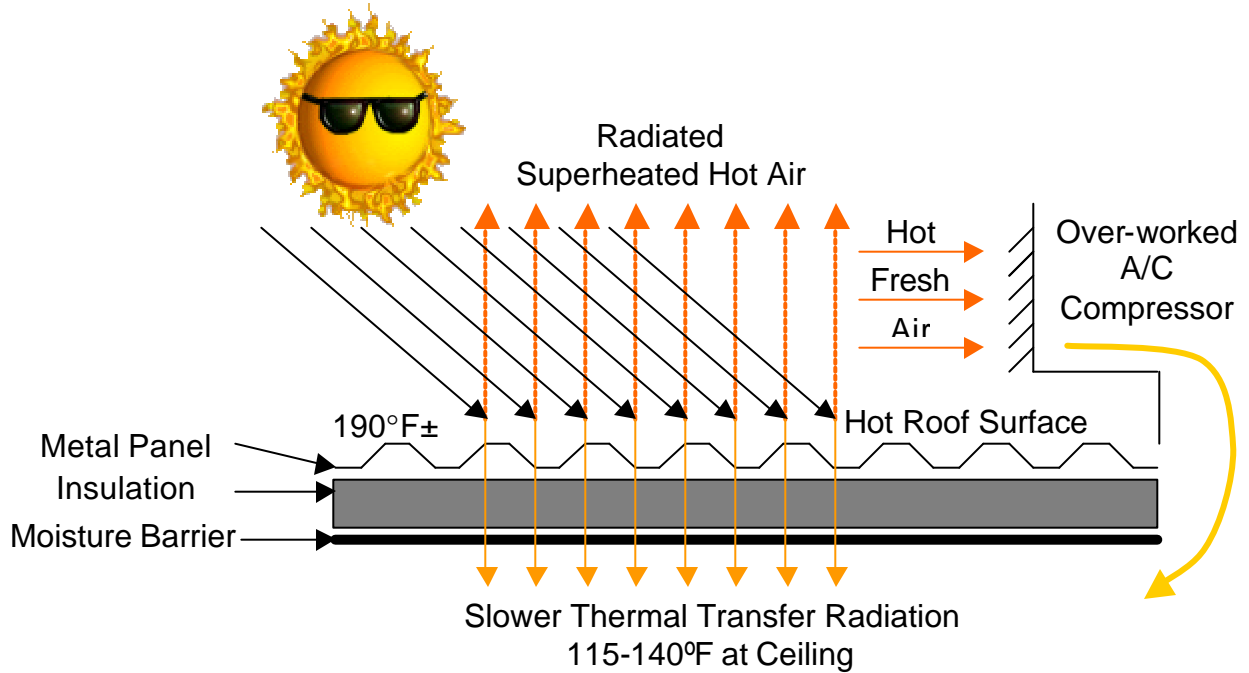


Thermal Effect on Metal Roofs



Heat Reflectivity is a major component to the performance of elastomeric coatings. It is important to understand three terms:

Emissivity is the percentage of absorbed energy a material can radiate away from itself. **Albedo** is the measure of reflectivity to the full spectrum of the sun's energy. This includes non-visible ultra-violet or infrared areas of the spectrum. **Conductive Heat Transfer** is a direct function of the temperature difference between a roof system's surface and the interior air.

Most roof systems [especially metal, BUR with or without metallic coating, or black EPDM] have very low emissivity and very low albedo which results in high surface temperatures and elevated conductive heat transfer. This is a major cause of heat gain. Bright, white coatings provide a very high emissivity and albedo. This reduces surface temperatures to near ambient, essentially stopping conductive heat transfer.

