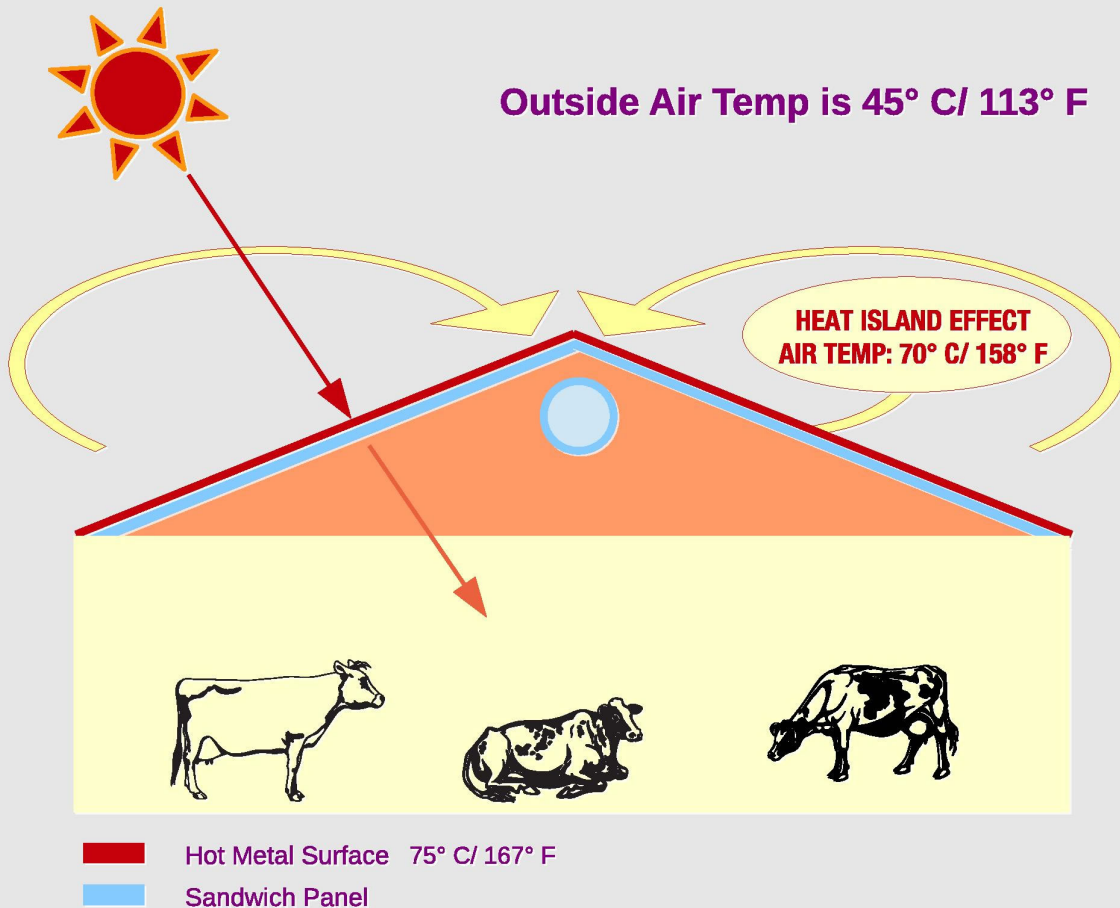


Benefits to Livestock Facilities



When the outside air temperature is 45° Celsius/ 113° F, Metal Roof heats up to 75 to 80° Celsius. Heat Island Effect kicks in, with the air temperature surrounding the building rising up to 70-75° Celsius.

The fresh air, taken in by the Ventilation/ HVAC system is at 70° C/ 158° F. This could run up a high Energy Bill if Climate Control is done through chiller units.

The flip side of a combination of a hot metal roof and bulk insulation is, the heat taken in, does not dissipate through the metal roof, with the Glasswool/ Rockwool, Polystyrene, Polyurethane based Bulk Insulation sandwich panels, trapping the heat in – as a Thermos/ Hot Lunch Box!

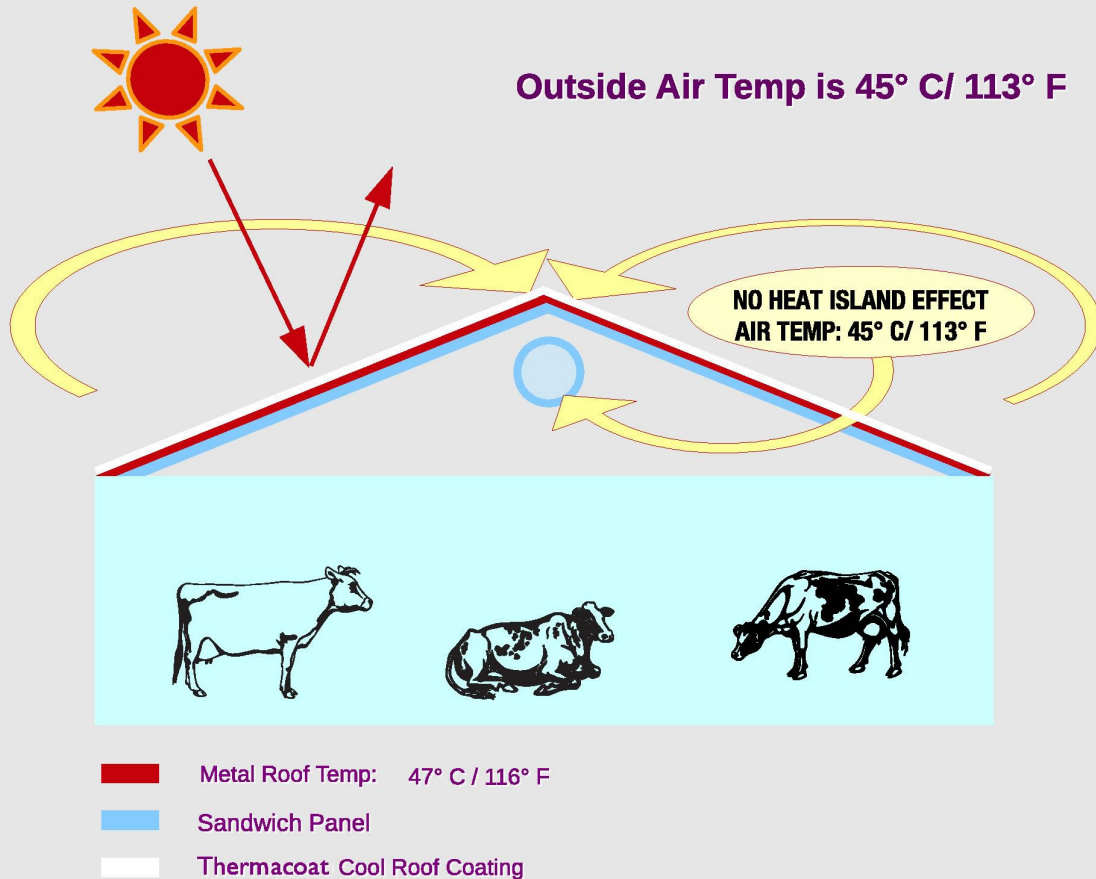
Heat Island Effect References:

- <http://heatisland.lbl.gov/> 
- <http://www.epa.gov/heatisd/about/index.htm> 

Do not get rid of the Sandwich Panel, a Cool Roof System on a Metal Roof in combination with Sandwich Panel changes the Climate Control equation.

THERMA  **COAT**
LIQUID THERMAL INSULATION

Benefits to Livestock Facilities



Cool Roof by Thermacoat (due to high Solar Reflective Index of SRI 110 to SRI 99, which functions on the basis of "Reflectivity of the best white surface and emissivity of the best black surface") prevents the Metal Roof from heating up. This prevents excessive Heat Build Up around the building, ensuring lower temperature of air that is taken in.

SRI value of 100 means ZERO Solar Heat Gain.

The High Emissivity of Thermacoat will also mean faster dissipation of heat, reducing the tendency for the unit to be a Hot Lunch Box.

Higher Producing Cows show more signs of Heat Stress, as they generate more heat as they eat more feed. Two pounds of milk production is lost for every pound of decreased dry matter intake when temperature and humidity levels are high.

1. Reduction in Heat Stress
2. Improved Comfort
3. Improved Health
4. Increased Productivity

THERMA  **COAT**
LIQUID THERMAL INSULATION