

## What is Radiant Barrier Foil?

It is a genuine aluminum foil laminated to a reinforced fire retardant building paper. Its extremely shiny surface intercepts and blocks 95% of the infrared heat radiating down from the roof during the summer.

## What do Research Scientists say?

Radiant Barrier Foils were originally used in the NASA Apollo missions to protect equipment from intense solar radiation. They are now available to protect your family's comfort

“Results indicate that the use of a Foil Radiant Barrier with standard low density fiberglass attic insulation will reduce the total heat transfer into the conditioned space by 40–50 percent for summer conditions. Results also indicate that for winter conditions, the heat loss from the conditioned space will be reduced by 15–20 percent by using Foil Radiant Barrier.”

Mechanical Engineering Department  
University of Mississippi

“In Florida the addition of a Radiant Barrier to an R–19 system is significantly more advantageous than R–30 ceiling insulation. In fact, it is possible that R–11 ceiling insulation plus a Radiant Barrier will outperform R–30 ceiling insulation in most of Florida.”

Florida Solar Energy Center

## Where should it be installed?

For best long term results, Radiant Barrier Foil should be stapled under the roof rafters. In hard to reach areas, complete coverage isn't necessary. For Example if 85% of the surface can be covered, then 85% effectiveness will be obtained.

## Proven Cost Effectiveness

Radiant Barrier Foil has been tested and proven to be a cost effective energy conservation product in testing conducted by:

The Florida Solar Energy Center

The Oak Ridge National Laboratory

The Tennessee Valley Authority

The University of Florida

The University of Mississippi

## What Does It Cost

Radiant Barrier Foil doesn't cost money; it saves money. In addition to improving comfort, it quickly pays for itself through lowering cooling bills. It then provides a tax free return year after year. Ask your authorized dealer for a quotation to install Radiant Barrier Foil in your attic.

**ACHIEVE A SAFE  
HEALTHY AND  
AFFORDABLE HOME**



**Comfort Institute**  
Consumer Education

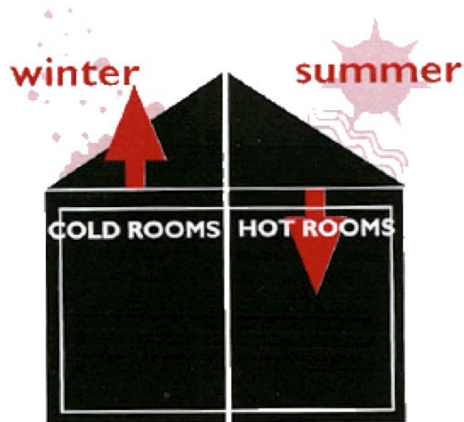
**Radiant Barrier  
Aluminum Foil**

Cool Down Hot Rooms  
Reduce Cooling Bills

# HOME & DUCT PERFORMANCE DIAGNOSTICS

The Problem:

Heat Loss/Heat Gain  
from Radiation



The Solution:

Heat Loss/Heat Gain  
from Radiation



**Radiant Barrier Foil improves comfort and  
pays for itself by reducing cooling bills**

**And reduces energy load requirements for  
heating and air conditioning systems**

## Facts about hot attics

**Concerned about high cooling bills or hot, uncomfortable rooms?** Research scientists have proven that invisible infrared heat radiating downward from the underside of your hot roof is the main way the sun's heat gets through your ceiling.

Conventional insulation absorbs the heat only to release it into your home later in the afternoon and evening. Insulation slows it but doesn't stop it.

**The solution:** Keep the hot roof energy from getting to the attic floor in the first place, with Radiant Barrier Foil stapled under the roof rafters. Radiant Barrier Foil also helps keep the heat in your home during cold winter nights.

**Results:** more comfortable temperatures in those rooms under your attic, and lower cooling bills.

## Do you have ducts in your attic?

Air conditioning picks up unwanted heat when it travels in hot attics. Scientists have discovered that ductwork typically loses 15% to 20% of the cooling energy put out by the air conditioner. The rooms furthest from the air conditioner suffer the most.

**The solution:** Radiant Barrier Foil under the rafters. Your attic ducts are then shielded from the intense heat beaming down from the hot roof. The air comes out of your supply vents cooler, and your air conditioner doesn't have to run as long.