

## **What's the inside scoop on R-Value?**

R-Value is a measurement of how well insulation performs against conductive heat loss. It represents resistance to one square meter of the insulation to a ONE DEGREE TEMPERATURE DIFFERENCE.

In other words, in a laboratory setting, a piece of insulation is placed between a warm surface of, say, 72 degrees, and a cool surface of 71 degrees. The time it takes for the cool surface to warm up to 72 degrees is the basis for how R-Value is calculated.

This test does not take the real world setting into account, like humidity, wind, moisture, or the fact that rarely is a house only 1 degree cooler or warmer than the outside temperature.

So what does all of this mean to you, the home owner? Not a darn thing. Even though we know what it actually means, unfortunately you still have to meet the building codes required for your area.

However, that does **not** mean that you can't also use what actually works too, like Super R Plus and TempShield So make sure you meet your building codes, but then add the products that will make your house or building more comfortable, and save you money.

## **How does reflective insulation work?**

Reflective insulation and radiant barrier are designed to block RADIANT heat. Radiant heat travels through space from a warm surface to a cooler surface. It can be heat from the sun, an electric heater, or even holding your hand above a warm stovetop.

Reflective insulation will block up to 97% of radiant heat, while regular bulk insulation (fiberglass, foam, etc.) will only block 10 - 20% of it.

This is extremely important to remember because up to 90% of all summer heat gain and up to 75% of all winter heat loss is radiant heat.

[Residential](#), [commercial](#) and [agricultural](#) buildings will all benefit from using the insulation offered by [A-1 Energy Doctor](#).