

There are three types of heat transfers: conduction, convection and radiation. Nearly 87% of the total building heat is transferred via this radiation. In this way, radiation is the most powerful cause of heat gain in any building.

Conventional insulation products such as fibreglass, mineral wool, foam board, cellulose, etc, are effective against conduction and convection. However, they have no effect on "radiated" heat transfers. They work by trapping small air pockets and reduce heat transfer by conduction and convection. The trapped air heats up and radiates this heat later into the building, sometimes for hours after sunset. The SunShield Radiant Heat Barrier technology targets this radiated heat generated in a building and reflects it with little cost.

### COOLER ROOF = HAPPIER YOU



**SAVE ENERGY & STAY COOL**

**SunShield**  
RADIANT HEAT BARRIER  
*...Making Homes Cooler...*

*...Don't Roof Without it...*

**GGi**  
RANGE OF BUILDING PRODUCTS and...  
*...you're good for life!*

- ARIMA  
Head Office  
Lot 41 O'Meara Industrial Estate  
O'Meara Road, Arima.  
Tel: 642-3434/3288  
/0969/0576  
Fax: 642-0970
- Port of Spain  
45 Cornelio St., Woodbrook  
Tel: 628-8289  
Fax: 622-7922
- Marabella  
129 Union Road Marabella.  
Tel/Fax: 658-0196
- Tobago  
Dutch Fort Road, Scarborough.  
Tel: 639-4863

Website: [www.ggitrinidad.com](http://www.ggitrinidad.com)  
Email: [sales@ggitrinidad.com](mailto:sales@ggitrinidad.com)

**SunShield**  
RADIANT HEAT BARRIER  
*...Making Homes Cooler...*

**COOL YOUR ROOF FOR ONLY \$1** per sq. ft.

**GGi**  
BUILDING TECHNOLOGIES

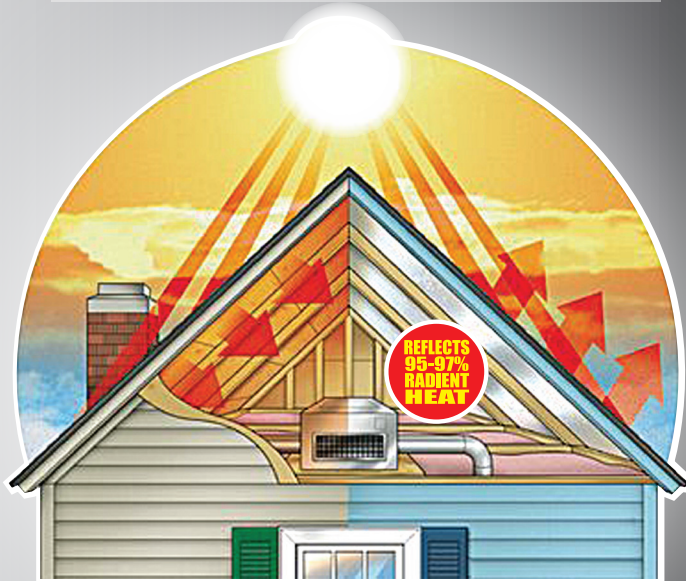


## What is it?

SunShield is a Radiant Heat Barrier used in the construction of Industrial and Domestic roofing, to reduce internal ambient temperatures.



SunShield has been extensively tested for system thermal properties, flame spread, vapor transmission, smoke density and physical properties.



## How does it work?

On hot days, solar energy is absorbed by the roof sheathing causing heat to be radiated downwards toward the ceiling. The surface temperature of the sheathing can easily exceed 150f thus heating the air trapped in the ceiling to over 135f. The ceiling absorbs this heat and reradiates it into the building.

When SunShield is installed under the rafters of your roof it reflects 99% of radiant heat from the hot sheathing, which is reflected back toward the roof thereby considerably reducing the amount of heat that moves through the ceiling into the rooms below the ceiling.

### TECHNICAL PROPERTIES

Weight	150G/M2 +/- 10%
Thickness	0.17mm +/- 10%
Tensile Strength	MD 756kg/cm CD 588kg/cm
Elongation	MD 45% CD 38%
Bursting Strength	20kg/cm
Reflectivity	95%
Emissivity	5%
Water Vapour Transmission Rate (g/m/day)	0.005g/m/day
Fire Spread Index (ASTM E-84)	15
Smoke Development Index (ASTM E-84)	20
Fire Rating	UBC Class 1

## Benefits of SunShield

- ✓ Keeps you cool and comfortable
- ✓ Affordable
- ✓ Reduced air-conditioning and energy cost
- ✓ Reduced mildew, mould and rotting in ceiling
- ✓ Easy cutting installation
- ✓ Environmentally friendly, safe and non toxic
- ✓ Lightweight and durable

