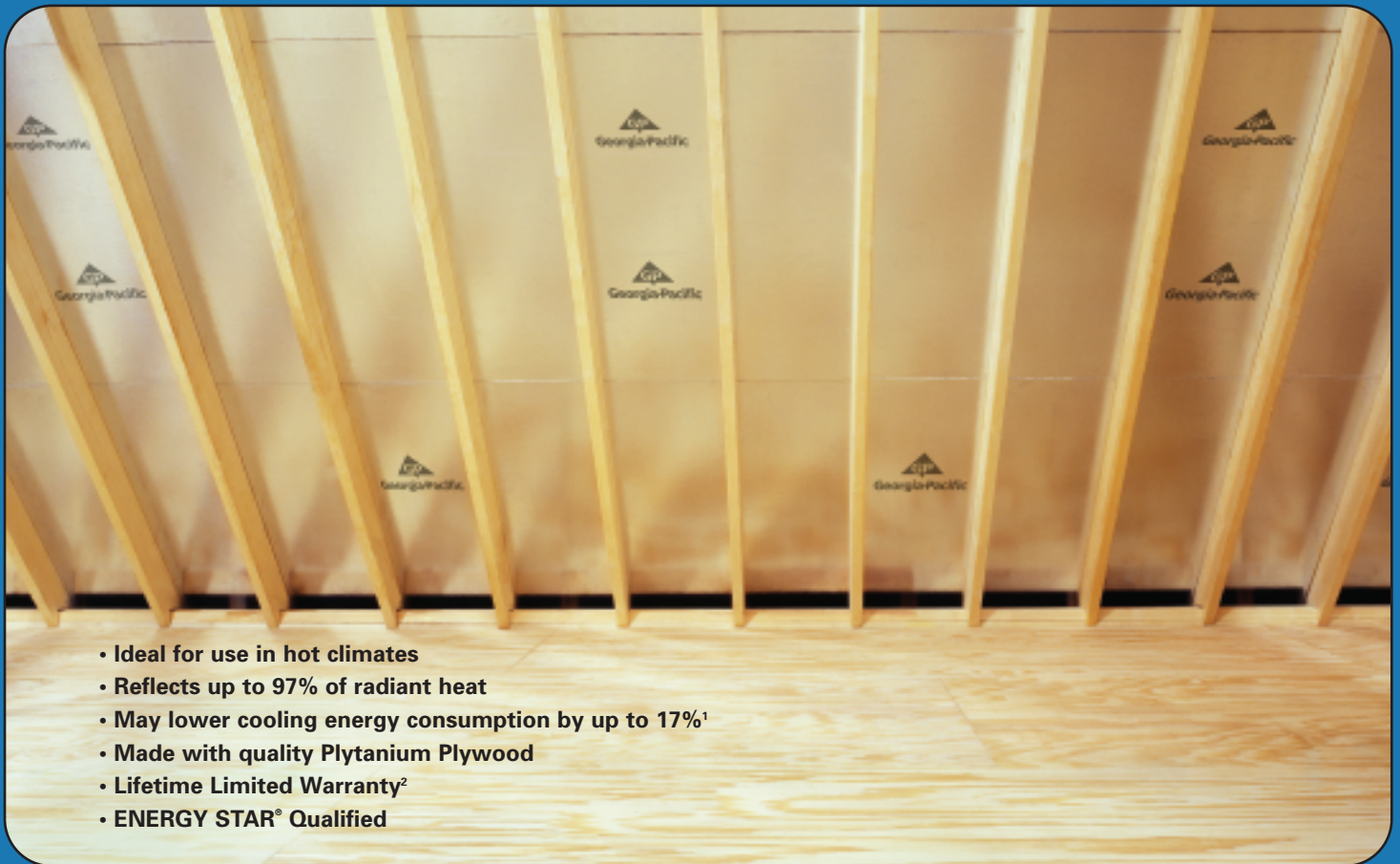


# PLYTANIUM® THERMOSTAT® RADIANT BARRIER ROOF SHEATHING



HELPS TAME ATTIC  
HEAT WHILE  
SAVING ENERGY

On a hot summer day, attics with Plytanium Thermostat Radiant Barrier Roof Sheathing stay up to 30°F cooler than attics with standard sheathing.



- Ideal for use in hot climates
- Reflects up to 97% of radiant heat
- May lower cooling energy consumption by up to 17%<sup>1</sup>
- Made with quality Plytanium Plywood
- Lifetime Limited Warranty<sup>2</sup>
- ENERGY STAR® Qualified

 Georgia-Pacific®

PLYTANIUM  
PLYWOOD



<sup>1</sup>According to radiant barrier studies.  
<sup>2</sup>See actual warranty for details, available at [www.gp.com/build](http://www.gp.com/build) or upon request.

# REFLECTS RADIANT HEAT, LOWERS ATTIC TEMPERATURES, HELPS IMPROVE ENERGY EFFICIENCY

Plytanium® Thermostat® Radiant Barrier Roof Sheathing is specially designed for attic sheathing applications and reflects up to 97% of the sun's radiant heat from being absorbed into the attic of your home. Now, you can maintain indoor comfort while potentially lowering cooling energy consumption.

For new homes, additions or renovations, Plytanium Thermostat Radiant Barrier Roof Sheathing is an excellent roof sheathing choice. It's durable and installs as easily as other roof sheathing. Plus, choosing Plytanium Thermostat Radiant Barrier Roof Sheathing can offer long-term savings by reducing cooling energy consumption.

## Lower temperatures, greater comfort

Plytanium Thermostat Radiant Barrier Roof Sheathing can lower peak attic temperatures up to 30°F by reducing summer radiant heat gain into the attic. Best of all, less heat is transferred into the living space through the ceiling, so indoor temperatures stay cool and comfortable while your cooling system may operate with greater energy efficiency.

Studies have shown that radiant barriers can reduce cooling energy consumption by up to 17%, depending on the design of the building, insulation levels, ventilation, occupancy, lifestyles and geographic location.<sup>1</sup>

Since temperatures inside the attic are reduced, attic mounted air conditioning equipment and duct systems may work more efficiently.

Please note: Radiant barriers may interfere with attic mounted antenna.

## Science behind the scenes

How does it work? If you've ever gone into an attic on a hot summer day, you know that radiant heat from the sun is typically absorbed into the attic as it passes through an ordinary roofing system. Plytanium Thermostat Radiant Barrier Roof Sheathing features quality plywood backed by a specially designed aluminum foil/kraft paper laminate. The panels are installed foil side down facing the attic space.

Since aluminum foil is highly reflective, up to 97% of the radiant heat is reflected from entering the attic space.

## WHY PLYWOOD FOR ROOFS?

**ROOF APPEARANCE.** Minimizes "telegraphing" due to edge swell; a visible outline of the panel under the shingles may occur with OSB, but is very rare with plywood.

**FLATTER ROOF.** Plywood will deflect (sag) less between the rafters than OSB over time under high humidity, helping maintain a flatter roof longer than OSB.

**LESS OPPORTUNITY FOR SHINGLE DAMAGE.**

- Pneumatically driven nails have a more consistent depth of drive into plywood than OSB resulting in less shingle damage.
- Holds shingles firmly.

**HIGHER LOAD CAPACITY THAN OSB.** The allowable uniform load and span rating for 15/32" plywood is higher than for 7/16" OSB, which means it can withstand heavier loads from snow and ice than OSB.

**DURABILITY.** Holds up better than OSB under incidental wettings, such as leaks through roofing material.

**STIFFER.** The stiffness design capacity for 15/32" plywood is 62% higher than for 7/16" OSB.

- Less deflection or sag over time.
- Allows use of heavier weight shingles and other roofing without excessive sheathing deflection.

**LIGHTER PANELS.**

- 15/32" plywood sheathing weighs 15% less than 7/16" OSB.
- Less stress on the roofing framing.

**PROVEN.** More than forty (40) years of reliable performance & certified APA quality.

**LIFETIME LIMITED WARRANTY.** Original homeowner protection for floors and roofs as long as you own your structure.\*

\* See actual warranty for complete details.

<sup>1</sup> Studies by Florida Solar Energy Council, Tennessee Valley Authority, Oak Ridge National Laboratory, Nevada Power Company, and Texas A&M University.

# QUESTIONS & ANSWERS

## Q: What is Plytanium® Thermostat® Radiant Barrier Roof Sheathing?

A: Plytanium Thermostat Radiant Barrier Roof Sheathing is a Rated Sheathing plywood panel with an aluminum foil/kraft paper laminate layer on one side. It is designed especially to reflect solar heat waves. In other words, it limits the transfer of heat from the outside (i.e. through roof) into the attic space. The bright aluminum foil is highly reflective; up to 97 percent of the radiant heat can be reflected away from the attic.

## Q: How does Thermostat Radiant Barrier Roof Sheathing work?

A: The radiant barrier foil surface reflects the radiant heat, as does a mirror, thus reducing radiant heat transfer into the attic.

## Q: What are the benefits of Thermostat Radiant Barrier Roof Sheathing in attics?

A: Plytanium Thermostat Radiant Barrier Roof Sheathing can lower attic temperatures by up to 30°F in the peak summer cooling season. Possible additional benefits include:

- **Decrease in Energy Consumption:** the cooling system can work more efficiently since there is lower radiant-heat transfer into the attic. Studies have shown that radiant barriers can reduce peak cooling energy consumption by up to 17 percent.
- **Increase in Operational Efficiency of Cooling Equipment:** the lower the temperature in the attic can enable the attic mounted air-conditioning equipment and duct systems to operate more efficiently.
- **Increase Utilization of Home Spaces:** spaces that do not have climate control, i.e., garages, attics, porches and others, may have a more moderate temperature, thereby allowing greater utilization.

## Q: How is Thermostat Radiant Barrier different?

A: Thermostat Radiant Barrier Sheathing is available on both Oriented Strand Board (OSB) and Plytanium Plywood substrates. 15/32" Plytanium Plywood will deflect less under high humidity, hold shingles more firmly, and has a higher load capacity than 7/16" OSB. 15/32" plywood will also resist the effects of incidental wettings during construction or as a result of roof leaks better than 7/16" OSB and allows the use of heavier weight roofing materials without excess sheathing deflection.

## Q: How much can I save by using Thermostat Radiant Barrier Roof Sheathing?

A: Energy usage varies according to many factors, including individual preferences and the fluctuation of energy costs in general. Therefore the exact savings will vary from installation to installation. The amount of energy consumed is directly related to two factors:

- The house cooling system, which includes insulation levels, roof color, thermostat settings, tightness of the building envelope, climate conditions, design and location of the house, size of house, and efficiency of cooling equipment installed, among many other factors.
- The percentage contribution of heat transfer through the ceiling to the home's cooling load. Cooling load is the amount of heat the air conditioner has to remove to sustain an adequate temperature in the living areas. Tests done by the Department of Energy have shown that ceiling-heat gains represent about 12-25 percent of the total cooling load on the house.

## Q: If I use Thermostat Radiant Barrier Roof Sheathing, do I still need attic insulation?

A: Yes, Thermostat Radiant Barrier Roof Sheathing is designed to work with, not in lieu of, standard attic insulation.

## Q: Can the usage of Thermostat Radiant Barrier Roof Sheathing damage my shingles?

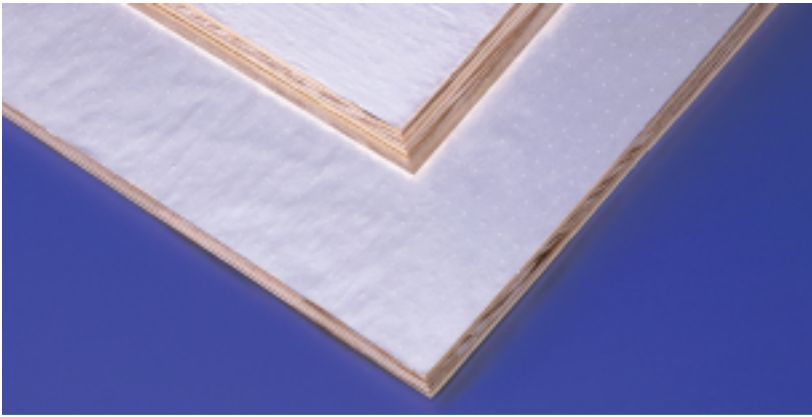
A: The Reflective Insulation Manufacturers Association (RIMA) has published Technical Bulletin #103 which reports that in peak summer conditions, the temperature of asphalt shingles is increased only an average of 2 to 5 degrees F over radiant barrier roof sheathing. This level of temperature rise is not significant and most shingle manufacturers have indicated that it does not affect their shingle warranties.

## Q: How much does Thermostat Radiant Barrier Roof Sheathing cost?

A: The cost will depend on where the product is installed and size of the roof, but homeowners can expect to pay an additional .10 to .20 cents per square foot.

## Q: Where can I find Thermostat Radiant Barrier Roof Sheathing?

A: For the dealer nearest you, contact BlueLinX Distribution at 1-866-502-BLUE.



## PRODUCT INFORMATION

### APPLICATIONS:

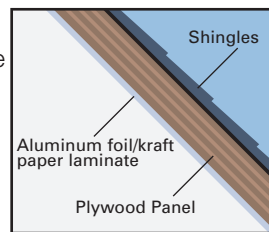
Roofing sheathing: Foil side installed down. Gap panel edges 1/8" minimum.  
 Wall sheathing: Foil should face out adjacent to a minimum 3/8" air space.

### SIZES:

4' x 8' panels are available in 15/32" or 19/32" plywood with aluminum foil backing.

### Installing Plytanium Thermostat Radiant Barrier Roof Sheathing

Apply Plytanium Thermostat Radiant Barrier Roof Sheathing with the foil side face down directly to the roof framing. See tables for maximum roof spans, fasteners and fastening schedule. For more information on roof sheathing installation, see American Plywood Association Form N335K. For radiant barrier roof sheathing to be effective long-term, the foilside, or reflective surface, must have a minimum 3/4" air space to properly reflect radiant heat. This applies to both attic areas and cathedral type ceilings.



### Recommended Maximum Spans for Plytanium Thermostat Radiant Barrier Roof Sheathing

(Panel strength axis perpendicular to supports and continuous over two or more spans)

Normal Panel Thickness	Panel Span Rating	Maximum Span With Panel Clips <sup>(a)</sup>	Maximum Span Without Panel Clips <sup>(a)</sup>
15/32"	32/16	32"	28"
19/32"	40/20	40"	32"

(a) Edge support may also be provided by tongue-and-groove edges or solid blocking.

### Fastening and Thickness Recommendations to Maximize Wind and Windborne Debris Resistance

The roof covering and the deck beneath it are your home's firstline of defense from high winds and rain. Install a roof deck made of Plytanium Thermostat Radiant Barrier Roof Sheathing that is a minimum of 19/32" thickness to maximize wind and windborne debris resistance. Use 10-penny common or 8-penny ring shank nails to secure the sheathing, nailed every four inches along the panel edges and every six inches in the field of the plywood panel. Make sure the nails penetrate the decking directly into the roof framing.

### The cool choice

To find out more about using Plytanium Thermostat Radiant Barrier Roof Sheathing to help homes keep their cool, call us at 1-800-BUILD GP or visit [www.gpplytanium.com](http://www.gpplytanium.com).

### Recommended Minimum Fastening Schedule for Plytanium Thermostat Radiant Barrier Roof Sheathing

(Increased nail schedules may be required in high wind zones and where roof is engineered as a diaphragm.)

Panel Thickness <sup>(a)</sup>	Nailing <sup>(b) (c)</sup>		
	Size	Maximum Spacing (in.)	
		Supported Panel Edges <sup>(d)</sup>	Intermediate
15/32" 19/32"	8d	6	12

(a) For stapling asphalt shingles use staples with a 15/16" minimum crown width and a 1" leg length. Space according to shingle manufacturer's recommendations.

(b) Use common smooth or deformed shank nails with panels.

(c) Other code-approved fasteners may be used.

(d) Supported panel joints shall occur approximately along the centerline of framing with a minimum bearing of 1/2". Fasteners shall be located 3/8" from panel edges.



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