

# RADIANT BARRIER SHEATHING (RBS)

## Product Specifications and Installation Instructions

- Reflects the Sun's Radiant Energy
- Helps Increase Energy Efficiency
- Minimizes Heat Transfer to Living Spaces
- Textured Exterior Surface for Sure Footing
- Limited 20-year Product Warranty





**WHY USE WEYERHAEUSER RADIANT BARRIER SHEATHING?**

Here's why—

- Reflects up to 97%<sup>(1)</sup> of the sun's radiant energy to help lower utility bills<sup>(2)</sup>
- Easy, one-step installation
- Less strain on attic-mounted appliances
- Long-term, reliable performance

The products in this guide are readily available through our nationwide network of distributors and dealers. For more information on other applications or other Weyerhaeuser products, contact your Weyerhaeuser representative.



Certified Sourcing  
www.sfiprogram.org  
SFI-0008

## FRAME THE ROOF AND FOIL THE SUN

Installing a radiant heat barrier is an efficient, cost-effective way to help keep interior living spaces comfortable while saving energy costs. Weyerhaeuser Radiant Barrier Sheathing (RBS) provides all these benefits with no additional labor or material hassles.

Thanks to an innovative wood-resin combination, every Weyerhaeuser RBS panel is manufactured flat, installs flat, and stays flat; and has been engineered to precise specifications so it resists problems like cupping, warp, and sag. The radiant foil layer is perforated for ventilation, to protect against condensation and moisture build-up.

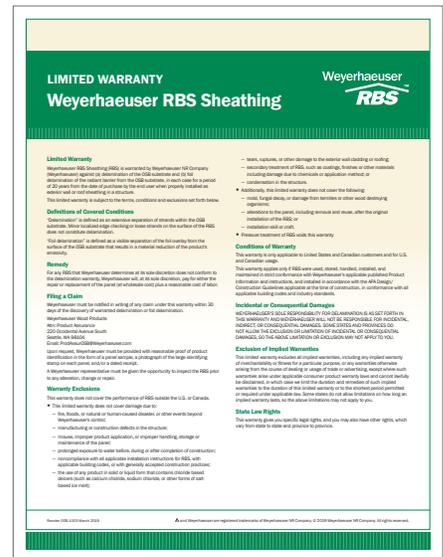
As an added plus, Weyerhaeuser RBS can even help keep unair-conditioned, uninsulated rooms like garages, workshops, and porches cooler, increasing a home's usable space. A cooler attic is not only better for storage, it also puts less strain on attic-mounted appliances and ductwork.

### Weyerhaeuser RBS Roof Panels

- Strong, stable, and uniform
- Engineered to stay flat.
- Manufactured with specially designed adhesives that provide secure foil attachment and better durability
- Covered by our limited 20-year product warranty

### Available Sizes

4' x 8' Weyerhaeuser RBS panels are available in three thicknesses: 7/16", 15/32", and 19/32".



Visit [weyerhaeuser.com/woodproducts/warranty](http://weyerhaeuser.com/woodproducts/warranty) for copies of this and other Weyerhaeuser product warranties.

## PRODUCT SPECIFICATIONS

Weyerhaeuser OSB, used to make Weyerhaeuser RBS, is manufactured in accordance with Voluntary Product Standard PS2 recognized by:

- Current codes set by the International Code Council and its members, IBC and IRC.
- The National Fire Protection's NFPA 5000 code.

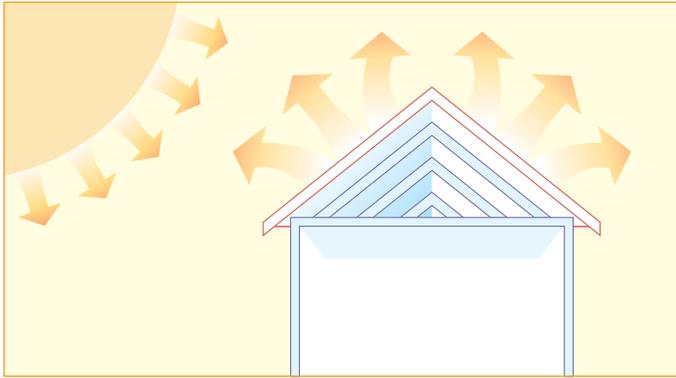
### Exposure 1 Bond Classification

Weyerhaeuser RBS is manufactured to an Exposure 1 bond classification. Exposure 1 panels are suitable for uses where they are not permanently exposed to the weather; they are intended to resist the effects of moisture on structural performance due to construction delays or other conditions of similar severity.

- (1) 97% reflectivity and 3% emittance measurements were derived by using an infrared reflectometer on the aluminum foil laminate in accordance with ASTM E408, Method A.
- (2) Actual savings will depend upon local utility rates, home size, and climate.

# WEYERHAEUSER RBS ROOF PANELS

## How Weyerhaeuser RBS Works



Foil-laminated Weyerhaeuser RBS panels reflect the sun's radiant energy back outside, away from the attic and house. Up to 97%<sup>(1)</sup> of the sun's radiant energy is transferred away from the home, significantly lowering attic temperatures and reducing the amount of energy needed to cool the home.

## How Traditional Roof Sheathing Works



Radiant energy transferred through standard roof sheathing creates heat build-up in the attic. With no barrier to restrict the heat, it radiates through the insulation into living spaces, causing room temperatures to rise. More energy is needed to cool the house, and that means higher energy costs for homeowners.

## ALLOWABLE LOADS AND APPLICATION GUIDELINES

### Maximum Spans and Allowable Uniform Roof Live Loads

Span Rating	Nominal Panel Thickness	Maximum Span		Allowable Live Load in PSF					
		With Edge Support <sup>(1)</sup>	Without Edge Support	Spacing of Supports					
				12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	32" o.c.	40" o.c.
24/16	7/16"	24"	24"	190	100	65	40	—	—
32/16	1 5/32"	32"	28"	325	180	120	70	30	—
40/20	1 9/32"	40"	32"	—	305	205	130	60	30

(1) Edge support being tongue-and-groove edges, panel edge clips (one midway between each support, or two equally spaced between supports if 48" on-center or greater), lumber blocking, or other.

*Weyerhaeuser RBS panels are intended for dry-use applications*

### General Notes

- Table is based on:
  - Exposure 1 rated sheathing.
  - Uniform loads.
  - 10 psf dead load.
  - Deflection criteria of L/180 total load and L/240 live load.
  - 24" or wider panels, continuous over two or more spans with the long dimension (or strength axis) across supports.
- Special conditions (such as heavy concentrated loads) may require engineering design in excess of these minimums; alternatively, allowable live loads may have to be decreased for dead loads greater than 10 psf (such as with tile roofs).

### Application and Handling Guidelines

- Do not exceed the span limitations shown on each panel's grade stamp.
- Improved perforations in the foil allow for drainage and ventilation.
- The foil face of Weyerhaeuser RBS does not compromise the structural integrity of the sheathing or negatively affect composition roofing materials.
- Weyerhaeuser RBS has a textured exterior surface for sure footing during rooftop installation.

Like any wood-based panel or product, Weyerhaeuser RBS is at risk of fungal decay or rot if exposed to repeated wetting or high-moisture environments. Wood-based panels exposed to these conditions may deteriorate, lose strength, or support mold growth, so it is critical that they are protected during transport, storage, construction, and installation. Some examples of adequate protection include:

- Cover Weyerhaeuser RBS with a tarp during shipping.
- Keep sheathing dry and out of standing water prior to installation. Store at least 4" off the ground.
- Store sheathing under a roof with minimum exposure to moisture.
- Only install Weyerhaeuser RBS in a roof system that protects materials from moisture and allows for drying.



Use stickers to keep sheathing at least 4" off the ground and out of standing water

# INSTALLATION INFORMATION

## Installation Guidelines

- Always make safety a priority on the jobsite. Proper personal protection equipment (PPE) is recommended for every person on the site and should include a hard hat, steel-toed shoes, safety glasses, high-visibility vest, and hearing protection (if required).
- Keep sheathing dry and out of standing water prior to installation; store at least 4" off the ground. Make sure sheathing is not damaged during storage or handling.
- Check building code requirements if using panel edge clips, as requirements vary depending upon the panel span rating and the rafter or truss spacing.
- Maintain a 1/8" gap along all edges. **DO NOT** glue roof sheathing.
- Avoid using panels less than 24" wide. If narrow panels must be used, do not install them at the ridge where they will experience heavier foot traffic during installation and maintenance. Place them in intermediate rows and make sure they cover at least two spans, with the long dimension running perpendicular to supports.
- Allow the sheathing to reach ambient moisture conditions before installing roof coverings. For best appearance, use heavyweight, textured, or laminated shingles to help hide any imperfections in the roof and to give the best appearance.

## Installation Instructions

### 1. Level the surface.

Make sure the framing is level and not twisted or bowed. Add shims or blocking as necessary to create a smooth, flat surface.

### 2. Install Weyerhaeuser RBS foil side down.

- Install sheathing foil side down (with foil against the rafters or trusses). When cutting panels, place foil side up.
- Lay out sheathing so each panel covers at least two spans and panel edges fall at the center of the supporting rafter or truss. **Leave a 1/8" gap around ALL edges.**

### 3. Nail and fasten in place.

- Sheathing should be fastened to framing with code-approved fasteners. For example, use 8d (0.131" x 2 1/2") nails at 6" on-center at ends and edges, and 12" on-center at intermediate supports (in field of panel). Space fasteners 3/8" from panel edges. **High wind areas may require a different nailing schedule.**
- Begin nailing by starting a row 3/8" from one edge, and work across the panel in rows. Continue working in rows until the panel is completely fastened. This technique keeps internal stresses, which could contribute to buckling later, from building up inside the panel.

### 4. Provide required ventilation and airspace.

To avoid moisture accumulation, **attic space ventilation must meet local building code requirements.** To achieve an effective radiant barrier, a **minimum airspace of 3/4" is required between the foil surface and other materials (such as insulation).** Do not allow materials other than rafters or trusses to come in contact with the foil side of the installed sheathing.

### 5. Cover roof to protect from weather.

Minimize weather exposure by covering the Weyerhaeuser RBS with 15# roofing felt (use 30# for extended exposures) that meets ASTM D226 or ASTM D4869 standards.

### 6. Install shingles.

Make sure roofing felt is flat and smooth before installing shingles. Follow all recommendations provided by the shingle manufacturer.



**WARNING:** This product can expose you to chemicals including wood dust which are known to the State of California to cause cancer, and methanol, which are known to the State of California to cause birth defects or other reproductive harm. Drilling, sawing, sanding or machining wood products can expose you to wood dust. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov) and [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).



Contact your local representative or dealer at:

## CONTACT US

1.888.453.8358 • [weyerhaeuser.com/woodproducts/contact](http://weyerhaeuser.com/woodproducts/contact)

March 2019 • Reorder OSB-4100

This document supersedes all previous versions. If this is more than one year old, contact your dealer or Weyerhaeuser rep.



and Weyerhaeuser are trademarks of Weyerhaeuser NR.  
© 2018 Weyerhaeuser NR Company. All rights reserved. Printed in the USA.