
Product Information & Installation Instructions

Eclipse™ OSB Radiant Barrier OSB Structural Panels from RoyOMartin

Installation Instructions: Site-Built and Modular Construction

Important notice to buyers and users of RoyOMartin Eclipse™ OSB Radiant Barrier: These instructions are not intended to cover every installation contingency. If any questions or problems arise concerning the installation of this product or its suitability for the purchaser's particular use, inquiries should be made to RoyOMartin (www.royomartin.com).

The information about the products and application instructions printed herein is current at the time of publication; however, in accordance with RoyOMartin's policy of constant product improvement, the right is reserved to vary these application instructions and product specifications without notice. Please ask for the most recent product information when placing your order.

DESCRIPTION

Eclipse™ OSB Radiant Barrier consists of a low emissivity perforated two-ply film laminated to an oriented strand board (OSB) structural panel made of wood strands aligned in three layers. Alternate layers are positioned at approximately right angles to one another. The layers are blended with resins and formed into continuous mats and bonded by heat and pressure. The orientation of strands creates a stable panel with greater strength in the long panel dimension than across the width. OSB sheathing panels are manufactured to be free of knots, core voids, grain defects, splits, and other irregularities. The panels are coated with a seal on all four (4) edges for added moisture resistance and dimensional stability. The panels also feature a coarse or rough textured surface that provides safer footing on pitched roofs.

STORAGE AND HANDLING

All Eclipse™ OSB Radiant Barrier panels should be stored to avoid excessive moisture pick-up and must be covered and kept free from construction dust and moisture during storage and installation. Inspect the protective bag when received, if provided, for tears and repair with staples and/or tape before storing. Store in a warehouse under cover of a roof or on concrete floors three (3) inches off the ground, remembering to rotate unit inventories frequently. When stored outdoors, cover panels loosely with a protective material. Clear or similar-type plastic covering is not recommended. If plastic or tarps are used, anchor them on top of the unit, keeping them away from the sides and bottom to ensure good air circulation and ventilation around the panels. Cut the banding on the unit to prevent edge damage. Allow 24 hours for panels to acclimatize to the surrounding environmental conditions prior to installation. Exposure to rain, snow or similar elements compromises product performance and may void the warranty.

Eclipse™ OSB Radiant Barrier panels are intended for protected construction applications. If subjected to rain or standing water during normal construction, the panel edges may swell, and mild surface roughening may occur. These reactions are normal when compressed wood products are exposed to water. If edge swelling and surface roughening are encountered, touch-sand panels where necessary after they dry.

Use reasonable care to avoid dropping panels on the edges, as chipping and damage to corners may occur. If you expect to transport the panels with a forklift, put the product on a pallet or supports to minimize panel damage from fork tines.

WORKABILITY

Utilize standard woodworking tools to saw, drill, and rout Eclipse™ OSB Radiant Barrier. It is recommended to cut Eclipse™ OSB Radiant Barrier with the saw blade rotation cutting toward the Eclipse and surface side.

CERTIFICATION

Eclipse™ OSB Radiant Barrier panels are certified by APA-The Engineered Wood Association and are manufactured in conformance with APA PRP-108 and U.S. Voluntary Product Standard PS2. The panels conform to the ICC Evaluation Service Legacy Report NER-108 for APA and are approved under the APA Rated Sheathing Standard. Eclipse™ OSB Radiant Barrier panels are verified by the Reflective Insulation Manufacturers Association International (RIMA-I).

FIRE/SMOKE RATING

Eclipse™ OSB Radiant Barrier has a class B fire and smoke rating, using ASTM E-84 Steiner Tunnel Test Method.

APPLICATIONS

Eclipse™ OSB Radiant Barrier is ideally suited for roof sheathing, with the shiny surface side facing down into the attic space.

CODE COMPLIANCE

TuffStrand® OSB structural panels with Eclipse™ OSB Radiant Barrier meet or exceed APA requirements and are recognized in the Uniform Building Code, the International Building Code, and the International Residential Code, and by the HUD Use of Materials Bulletin Number UM-40c.

AVAILABLE SIZES AND THICKNESSES

Thickness (product classes)		Width (nominal inches)	Length (nominal inches)	Pieces (unit)
7/16	11 mm	48"	96"	83
7/16	11 mm	48"	108"	82
7/16	11 mm	48"	120"	86
15/32	12 mm	48"	96"	72
15/32	12 mm	48"	120"	75
19/32	15 mm	48"	All	62

SPAN RATING

7/16	(11 mm)	24/16
15/32	(12 mm)	32/16
19/32	(15 mm)	40/20

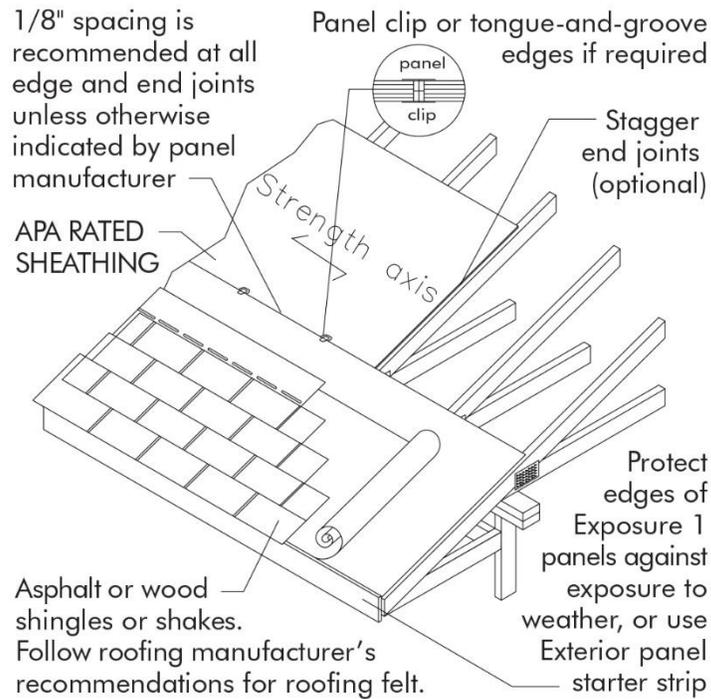
INSTALLATION

Roof Sheathing Installation

- Install with the long dimension or strength axis perpendicular to framing member and with the panel continuous over two or more spans.
- Edge support shall be provided where indicated on drawings by use of panel clips.
- Non-metallic spacer clips are recommended.
- Panel end joints shall occur over framing member. Provide 1/8" minimum gap along the 8' edge and 1/8" minimum gap along the 4' end. See APA Panel Roof Sheathing diagram on the following page.
- Stagger end joints in succeeding panel rows a minimum of one support spacing.
- Nail 6" O.C. along supported panel edges and 12" O.C. at intermediate supports. Use 8d common nails for panels up to 1". For panels exceeding 1", use 8d ring shank or 10d common nails. Other code-approved fasteners may be used. See APA Table 36.
- **Panels must be protected upon installation by an approved weatherproof material. An "approved weatherproof material" is material or a combination of materials, such as asphalt-impregnated felt and asphalt shingles or similar materials currently accepted by model code authorities and existing standards for the intended application. Failure to protect Eclipse™ Radiant Barrier from standing water or rain will void the manufacturer's warranty.**
- TuffStrand® OSB with Eclipse™ OSB Radiant Barrier may be extremely slippery. Installers should always place the skid-resistant side up, wear rubber soled or skid-resistant shoes, and exercise extreme caution when installing roof sheathing.
- For more information, visit www.apawood.org.

**If Eclipse™ OSB Radiant Barrier is exposed to moisture, RoyOMartin recommends to; allow all the panels to dry before installing roofing materials. Do not install roofing materials over wet substrate.*

APA PANEL ROOF SHEATHING



Notes:

1. Cover sheathing as soon as possible with roofing felt for extra protection against excessive moisture prior to roofing application.
2. For pitched roofs, place screened surface or side with skid-resistant coating up if OSB panels are used. Keep roof surface free of dirt, sawdust and debris, and wear skid-resistant shoes when installing roof sheathing.
3. For buildings with conventionally framed roofs (trusses or rafters), limit the length of continuous sections of roof area to 80 feet maximum during construction to allow for accumulated expansion in wet weather conditions. Omit roof sheathing panels in each course of sheathing between sections and install "fill in" panels later to complete roof deck installation prior to applying roofing.

TABLE 36
RECOMMENDED MINIMUM FASTENING SCHEDULE FOR APA PANEL ROOF SHEATHING
(Increased nail schedules may be required in high wind zones and where roof is engineered as a diaphragm.)

Panel Performance Category ^c	Nailing ^{a,b}		
	Size ^d	Maximum Spacing (in.)	
		Supported Panel Edges ^e	Intermediate
3/8 – 1	8d	6	12 ^f
1-1/8	8d or 10d	6	12 ^f

- a. Use common smooth or deformed shank nails for panels with Performance Category 1 or smaller. For 1-1/8 Performance Category panels, use 8d ring- or screw-shank or 10d common smooth-shank nails.
- b. Other code-approved fasteners may be used.
- c. For stapling asphalt shingles to Performance Category 3/8 and thicker panels, use staples with a 15/16-inch minimum crown width and a 1-inch leg length. Space according to shingle manufacturer's recommendations.
- d. See Table 6, page 14, for nail dimensions.
- e. Supported panel joints shall occur approximately along the centerline of framing with a minimum bearing of 1/2". Fasteners shall be located 3/8 inch from panel edges.
- f. For spans 48 inches or greater, space nails 6 inches at all supports.

ADDITIONAL INFORMATION

Visit APA - The Engineered Wood Association (www.apawood.org) for additional instructions and recommendations on more aggressive nailing patterns to minimize buckling of wood structural panels. RoyOMartin's products are strength designed to work best with nailing patterns 6" on center on all panel edges and 12" in the intermediate portion of the panel. If local code nailing patterns require a tighter nailing pattern, please refer to APA's suggested nailing instructions. Nail to 12" or 24" on center at ends, edges and intermediate supports, allow panels to acclimate to normal local conditions and just before the finish wall covering is applied, then nail to local code's tighter nailing pattern. Failure to follow these guidelines will most commonly result in severe buckling and is not a result of manufacturing or product performance. In the case where these instructions cannot be followed, RoyOMartin recommends its 7/16" panel with a 24/16 span rating.

Always nail panel edges 3/8" from panel edges. Failure to nail to this requirement will result in a highlighted edge raising, and in the case of more than normal wetting, severe edge swell and is not a result of manufacturing or product performance.

RoyOMartin OSB is a wood-based product and caution should be used in storage of these products, as wetting will cause wood to swell. RoyOMartin's OSB is shipped, when provided, to these areas individually bagged; we suggest RoyOMartin panels be kept covered until point of installation.

Failure to follow responsible installation and handling instructions is not a manufacturing issue. If proper installation and/or handling procedures are not followed, it is not the responsibility of the manufacturer.

California Prop 65 Warning: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or otherwise determine what safeguards or personal protection equipment may be necessary to prevent inhaling wood dust.