

# LP® TECHSHIELD® RADIANT BARRIER INSTALLATION INSTRUCTIONS

## BASIC USES

LP® TechShield® Radiant Barrier roof sheathing installs just like regular roof sheathing, so there are no additional labor costs. But unlike conventional sheathing, LP TechShield sheathing features a thin, durable layer of aluminum laminated to our OSB roof sheathing. This creates a highly effective radiant barrier.

## CLIMATE CONSIDERATIONS

The benefits of radiant barrier sheathing will vary by climate and will have the most impact on reducing cooling costs when used in warm climate regions that have significant solar radiation.

## CONDENSATION

Under certain conditions, moisture may condense on the underside of roof sheathing. In most circumstances, any condensation that forms will dissipate as the attic warms. During extended cold weather, however, condensation may form as frost could accumulate. To minimize this, radiant barrier sheathing should be installed in homes with well-ventilated attics that have been properly air-sealed to prevent transfer of moist heated air from the living space to the attic.

## STORAGE AND HANDLING

Store LP TechShield panels in a clean, dry area. Do not store in direct contact with the ground. Protect from moisture prior to and during installation. Outside storage, if necessary, requires panels to be covered with plastic sheets or tarpaulins with the sides loosely covered to provide adequate air ventilation.

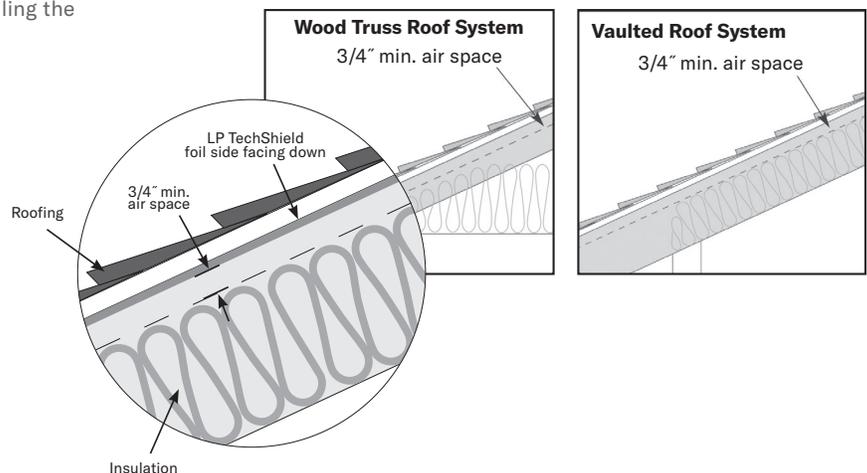
Handle LP TechShield panels as you would other APA® rated LP sheathing products. Be careful not to drop on corners or crush panel edges. Keep panels well-supported and neatly stacked to prevent warping. Use caution to avoid damage to the radiant barrier foil surface.

## ROOF SHEATHING INSTALLATION

- The foil or radiant barrier face should always be placed down against the roof supports. The skid-resistant side should be facing up, and be sure to wear skid-resistant shoes when installing the roof sheathing.

- Install with the long dimension or strength axis of the panel across supports and with the panel continuous over two or more spans.
- Provide 1/8" minimum space at panel ends and edges. Use a spacer tool (i.e. 10d box nail) to assure accurate and consistent spacing.
- Panel end-joints shall occur over framing. Stagger end joints in each succeeding row.
- Provide additional panel stiffness by installing panel edge clips mid-span on all unsupported edges.
- In the absence of project specifications:
  - Nail 6 in. o.c. along supported panel ends and 12 in. o.c. at intermediate supports.
  - Use 8d common nails for panels up to 1 in. nominal thickness.
- Drive nails 3/8 in. from panel edges.
- Larger nails or tighter nail spacing may be required by code or approved construction documents.
- Other code-approved fasteners may be used.
- Cover roof sheathing as soon as possible with roofing felt or shingle underlayment for protection against excessive moisture prior to roofing. If any edge swelling occurs prior to roof underlayment installation, all raised joints should be sanded flat.
- Allow sheathing to adjust to humidity and moisture conditions before shingle installation.
- Remove wrinkles and flatten surface of shingle underlayment before installing shingles. High performance shingle underlayment is recommended for better results.
- Heavier weight and/or textured shingles are recommended to better mask imperfections in roofing assembly.

NOTE: Check with your local building department before deciding on an installation method.



**DEFEND YOUR BUILD®**

**LP TechShield®**  
RADIANT BARRIER

For product catalog & complete warranty details, visit [LPCorp.com](http://LPCorp.com)

## GABLE INSTALLATION

Installing LP® TechShield® sheathing in the gable ends will help contribute to the reduction in solar gain and the overall energy-efficient design of the attic space. As with the installation of LP TechShield sheathing on roofs, it is important that it is installed with the foil side facing into the attic.

Recommended uniform roof live loads for APA® rated sheathing <sup>(c)</sup> • LP TechShield with long dimension perpendicular to supports <sup>(e)</sup>													
APA RATED SHEATHING <sup>(c)</sup>		Maximum Span (in.)			Allowable Live Loads (PSF) <sup>(d)</sup>								
Panel Span Rating	Performance Category <sup>(f)</sup>	With Edge Support <sup>(a)</sup>	Without Edge Support	Spacing of supports center-to-center (in.)									
				12"	16"	20"	24"	32"	40"	48"	60"		
12/0	5/16	12	12	30	30	-	-	-	-	-	-	-	-
16/0	5/16	16	16	70	50	-	-	-	-	-	-	-	-
20/0	5/16	19.2	19.2	120	100	30	-	-	-	-	-	-	-
24/0	3/8	24	19.2 <sup>(b)</sup>	190	100	60	30	-	-	-	-	-	-
24/16	7/16	24	24	190	100	65	40	-	-	-	-	-	-
32/16	15/32	32	28	300	165	110	65	30	-	-	-	-	-
40/20	19/32	40	32	-	275	195	120	60	30	-	-	-	-
48/24	23/32	48	36	-	-	270	175	95	45	30	-	-	-
60/32	7/8	60	40	-	-	-	305	165	100	70	35	-	-
60/48	1-1/8	60	48	-	-	-	305	165	100	70	35	-	-

(a) Panel edge clips (one midway between each support, except two equally spaced between supports 48" on center), lumber blocking or other

(b) 19.2" for 3/8" and 7/16" panels, 24" for 15/32" and 1/2" panels

(c) Includes APA RATED SHEATHING/CEILING DECK

(d) 10 psf dead load assumed

(e) Applies to panels 24" or wider applied over two or more spans

(f) Performance category replaces the nominal panel thickness

**For a copy of the limited warranty or for installation and technical support visit: [LPCorp.com/TechShield](http://LPCorp.com/TechShield)**

**Phone:** 888-820-0325

**Email:** [customer.support@lpcorp.com](mailto:customer.support@lpcorp.com)

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**⚠ WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection. For more information go to [www.P65Warnings.ca.gov/wood](http://www.P65Warnings.ca.gov/wood).

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