

Product Evaluation

EC22 | 0919

Engineering Services Program

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

For more information, contact TDI Engineering Services Program at (800) 248-6032.

Evaluation ID: EC-22

Effective Date: September 1, 2019

Re-evaluation Date: September 2023

Product Name: LP® SmartSide® Strand Substrate Lap and Panel Siding

Manufacturer: Louisiana-Pacific Corporation
414 Union Street
Suite 2000
Nashville, TN 37219
(800) 450-6106

General Description:

LP® SmartSide® Strand Substrate lap and panel siding are a zinc borate treated composite of oriented strand board (OSB) bonded to a 0.012" thick phenolic resin-saturated, primed paper overlay. The lap siding covered in this evaluation report is available in 3/8 and 7/16 Performance Categories. The lap siding covered in this evaluation report is available in 5", 6", 7, 8", 9.5", and 12" widths and comes in 16' lengths. The panel siding covered in this evaluation report is available in 3/8", 7/16, and 19/32" thicknesses. The panel siding has shiplap edges. The panel siding is 4' wide and 4' to 10' in length.

Limitations:

Lap Siding

- **Wall Framing:** Minimum Spruce-Pine-Fir or Southern Yellow Pine dimensional lumber (minimum specific gravity of 0.42).
- **Wall Stud Spacing:** Refer to Table 1.

- **Fastener:** 6d nails - minimum smooth shank diameter of 0.092", minimum length of 2").
- **Design Pressure:** The allowable design pressure for the lap siding is specified in Table 1.

Table 1
LP® SmartSide® Strand Substrate Lap Siding
Allowable Design Pressure

Lap Siding Thickness	Maximum Wall Stud Spacing	Siding Width (in.)	Allowable Design Pressure (psf)
3/8"	16"	5	78
		6	63
		7	52
		8	45
		9.5	37
		12	28
7/16"	16"	6	63
		7	52
		8	45
		9.5	37
		12	28
	24"	6	42
		7	35
		8	30
		9.5	25
		12	19

Panel Siding (3/8 Performance Category)

- **Shiplap Edge Thickness:** 5/16" Use shear capacity for 5/16 Performance Category.
- **Wall Framing:** Douglas Fir-Larch or Southern Yellow Pine dimensional lumber (minimum specific gravity of 0.50).
- **Wall Stud Spacing:** Refer to Table 2.
- **Fastener:** 6D box nails - minimum smooth shank diameter of 0.092", minimum length of 2")
- **Design Pressure:** The allowable design pressure for the panel siding is specified in Table 2.
- **Lateral Load Resistance:** The allowable lateral load for the panel siding is specified in Table 2.

Panel Siding (7/16 or 19/32 Performance Category)

- **Shiplap Edge Thickness:** 3/8"-Use shear capacity for 3/8 performance Category.
- **Wall Framing:** Douglas Fir-Larch or Southern Yellow Pine dimensional lumber (minimum specific gravity of 0.50).
- **Wall Stud Spacing:** Refer to Table 2.
- **Fastener:** 8D box nails - minimum smooth shank diameter of 0.113", minimum length of 2-1/2").
- **Design Pressure:** The allowable design pressure for the panel siding is specified in Table 2.
- **Lateral Load Resistance:** The allowable lateral load for the panel siding is specified in Table 2.

**Table 2
LP® SmartSide® Strand Substrate Panel Siding
Allowable Design Pressure and Allowable Lateral load**

Performance Category	Fastener	Fastener Spacing for Studs Spaced 16" o.c.		Fastener Spacing for Studs Spaced 24" o.c.		Allowable Design Pressure	Allowable Lateral Load
		Perimeter	Field	Perimeter	Field		
5/16	6d box nails	3" o.c.	12" o.c.	3" o.c.	12" o.c.	50 psf	350 plf
3/8	8d box nails	3" o.c.	12" o.c.	3" o.c.	6" o.c.	50 psf	410 plf
7/16	-	-	-	-	-	-	-
19/32	-	-	-	-	-	-	-

Installation:

General:

LP®SmartSide® Strand Substrates Lap Siding:

The siding must be installed in accordance with the manufacturer’s application instructions and this product evaluation report.

The lap siding must not be used as wall bracing.

The lap siding may be installed over sheathing or directly to the wall studs.

The lap siding must be blind nailed to each wall stud per the manufacturer’s application instructions using the fasteners specified in this evaluation report. One fastener per wall stud is required. The fasteners must be located 3/4" from the top edge of the siding.

Maximum wall stud spacing must be as specified in Table 1.

Lap siding joints must be staggered over successive courses. For installation with or without nailable sheathing, joints shall occur over wall framing.

If a non-structural sheathing (foam or fiberboard) is used, then the length of the fasteners used to secure the siding to the wall framing must be increased by the thickness of the non-structural sheathing.

The fasteners must penetrate the wall framing a minimum of 1-1/2".

LP®SmartSide® Strand Substrates Panel Siding:

The panel siding must be installed in accordance with the manufacturer's recommended application instructions and this product evaluation report.

The panel siding may be used as wall bracing.

Panel siding not used for lateral load resistance may be installed over sheathing or directly to the wall studs.

Panel siding used for lateral load resistance must be installed directly to the wall studs.

The panel siding must be installed with the long dimension in the vertical direction.

Maximum wall stud spacing must be as specified in this evaluation report.

Fasteners must penetrate wall studs a minimum of 1-1/2".

Fastener spacing must be as specified in Table 2.

3/8 Performance Category panel siding requires a double row of fasteners along the vertical panel shiplap edges. Fastener location must be as specified in the manufacturer's application instructions.

Note: Keep the manufacturer's installation instructions available on the job site during the application. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.