



Product Evaluation

EC35 | 0817

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-35

Effective Date: August 1, 2017

Re-evaluation Date: August 2021

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

Manufacturer: Louisiana Pacific Corporation
414 Union Street
Suite 2000
Nashville, Tennessee 37219
Telephone: 800-450-6106

Product Description:

LP SmartSide Fiber Substrate Lap Siding and LP SmartSide Fiber Substrate Panel Siding:

- Fiber Substrate Lap and Panel Siding are engineered wood exterior wall covering materials that are suitable for exposure to weather or conditions of similar severity, when fastened to vertical supports or approved nailable wood structural panels in accordance with this evaluation report.
- Fiber Substrate Lap and Panel Siding products consist of engineered wood siding manufactured, with an overlay, as panel or lap sidings in smooth and textured surfaces, unfinished, factory primed intended to be exposed to the weather after painting.
- Fiber Substrate Lap and Panel Siding comply with the American National Standard for Engineered Wood Siding (ANSI A135.6), as referenced in the IBC and IRC.

The following LP SmartSide® Fiber Substrate Lap and Panel Siding products have been accepted:

Primed Lap Siding is nominal 1/2" or 7/16" thick. The siding comes in 16 foot lengths. Available widths are 6", 8", 9", 9.5" and 12".

Primed Bold Profile Lap Siding is nominal 1/2". The siding comes in 12" and 16" wide profiles, and is 16' in length. Cedar Shake profile is nominal 1' x 4'.

Primed Panel Siding is nominal 7/16" thick and has shiplap or square edges. The siding is 4' wide and ordinarily comes in lengths of, 8', and 9'. The panel siding covered under this report is available in surface textures including vertical groove, reverse board & batten, 8" on center cedar texture groove, and stucco texture.

Limitations

Lap Siding

- Wall Framing: Minimum Spruce-Pine-Fir dimension lumber (minimum specific gravity of 0.42).
- Wall Stud Spacing: No greater than 16" o.c.
- **Fastener:** Hot Dipped Galvanized per ASTM A153 Class D box nails, minimum smooth shank diameter of 0.113".
- **Design Pressure:** Wind design pressure rating for lap siding must be specified in Table 1.

Table 1

LP® SmartSide®, Fiber Substrate Lap Siding

| Lap Siding | Maximum Wall Spacing | Siding Width | Allowable Design Pressure (psf) | |
|------------|----------------------|--------------|---------------------------------|----------------|
| | | | 1-1/2" Penetration | 2" Penetration |
| 7/16" | 16" o.c. | 6.0" | 78 | 91 |
| 7/16" | 16" o.c. | 8.0" | 56 | 66 |
| 7/16" | 16" o.c. | 9.0" | 49 | 57 |
| 7/16" | 16" o.c. | 9.5" | 46 | 54 |
| 7/16" | 16" o.c. | 12.0" | 35 | 42 |

Panel Siding

- **Wall Framing:** Minimum Spruce-Pine-Fir dimension lumber (minimum specific gravity of 0.42).
- **Wall Stud Spacing:** No greater than 16" o.c.
- **Fastener:** 8d Hot Dipped Galvanized per ASTM A153 Class D box nails (minimum head diameter of 0.270"), minimum smooth shank diameter of 0.113".
- **Design Pressure:** Wind design pressure rating for panel siding must be specified in Table 2.

Table 2

LP® SmartSide® Fiber Substrate Panel Siding

| Panel Siding | Fastener Spacing | Stud Spacing | Allowable Design Pressure (psf) | |
|--------------|-----------------------------------|--------------|---------------------------------|----------------|
| | | | 1-1/2" Penetration | 2" Penetration |
| 7/16" | 6" o.c. perimeter; 12" o.c. field | 16" o.c. | 32 | 38 |
| 7/16" | 6" o.c. perimeter; 6" o.c. field | 16" o.c. | 65 | 77 |

Bold Series Lap Siding:

- Wall Framing: Minimum Spruce-Pine-Fir dimension lumber (minimum specific gravity of 0.42).
- Wall Stud Spacing: No greater than 16" o.c.
- Fastener: Hot Dipped Galvanized per ASTM A153 Class D box nails, minimum smooth shank diameter of 0.113". Three fasteners each piece at each stud.
- Design Pressure: Wind design pressure rating for panel siding must be specified in Table 3.

Table 3**LP® SmartSide® Fiber Bold Lap Siding**

| Lap Siding | Maximum Wall Stud Spacing | Siding Width | Allowable Design Pressure (psf) | |
|------------|---------------------------|--------------|---------------------------------|----------------|
| | | | 1-1/2" Penetration | 2" Penetration |
| 1/2" | 16" o.c. | 12.0" | 98 | 98 |
| 1/2" | 16" o.c. | 16.0" | 78 | 80 |

Application Instructions**LP® SmartSide® Fiber Substrate Lap Siding:**

- The siding must be installed in accordance with the manufacturer's application instructions and this product evaluation report.
- The lap siding may not be used as wall bracing.
- The lap siding may be installed over wood structural panel sheathing or directly to the wall studs.
- The lap siding must be nailed to each wall stud per the manufacturer's application instructions using the fasteners specified in this evaluation report.
- Maximum wall stud spacing must be 16" o.c.
- Lap siding joints must be staggered over successive courses. For installation with or without wood structural panel sheathing, joints must 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 studs must be increased by the thickness of the non-structural sheathing.
- Fasteners must penetrate wall studs, and/or combination of studs and wood structural panel sheathing (plywood or OSB) a minimum of 1-1/2".
- Stainless steel fasteners are an acceptable alternate to ASTM A153 Class D hot dipped galvanizing.

LP® SmartSide®, Fiber Substrate Panel Siding:

- The panel siding must be installed in accordance with the manufacturer's recommended application instructions and this product evaluation report.
- LP SmartSide Fiber Substrate Panel Siding may be used as bracing Method 8 (HPS) for conventional wood-framed walls as specified in IBC Section 2308.9.3, Table 2308.9.3(5) and IRC Section R602.10, Table R602.10.2. Where wind speeds exceed 110 MPH, design values for Hardboard Panel Siding may be found in the ICC 600, Standard for Residential Construction in High Wind Regions.
- Panel siding may be installed over wood structural panel sheathing or 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 16" o.c.
- Fasteners must penetrate wall studs, and/or combination of studs and wood structural panel sheathing (plywood or OSB) a minimum of 1-1/2".
- Stainless steel fasteners are an acceptable alternate to ASTM A153 Class D hot dipped galvanizing.
- Minimum fastener spacing is 6" o.c. on panel edges and 12" o.c. in the field. The underlap edge of shiplap panels must be nailed at 6" o.c., the overlap flange of the adjacent panel should be nailed 1" in from the edge of the panel at 6" o.c. nailing through the full thickness of the panel. This is the standard fastener pattern, please see the application instructions for details.

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