

LP Legacy[™] Sub-Flooring Louisiana-Pacific Corporation

PR-N127

Revised September 5, 2018

Product: LP Legacy[™] Sub-Flooring LP Building Products, Louisiana-Pacific Corporation, 414 Union St., Suite 2000 Nashville, TN, 37219 (888) 820-0325 www.lpcorp.com

1. Basis of the product report:

- 2018 International Building Code (IBC) and 2015 IBC: Sections 104.11 Alternative materials and 2303.1.5 Wood structural panels
- 2012 and 2009 IBC: Sections 104.11 Alternative materials and 2303.1.4 Wood structural panels
- 2018 International Residential Code (IRC) and 2015 IRC: Sections R104.11 Alternative materials and R503.2 Wood structural panel sheathing
- 2012 and 2009 IRC: Sections R104.11 Alternative materials and R503.2 Wood structural panel sheathing
- DOC PS 2, Performance Standard for Wood-Based Structural-Use Panels
- ASTM D7033, Standard Practice for Establishing Design Capacities for Oriented Strand Board (OSB) Wood-Based Structural-Use Panels
- APA Reports T2006P-17, T2008P-99, T2008P-100, T2008P-101, T2008P-102, and T2017P-29, and other qualification data
- 2. Product description:

LP Legacy[™] Sub-Flooring is made with strands of various species and strand classifications, meeting DOC PS 2 with a floor sheathing span rating and is in accordance with the in-plant manufacturing standard approved by APA. LP Legacy Sub-Flooring is available in performance categories of 19/32, 5/8, 23/32, 7/8, and 1-1/8, and in 4x8-foot nominal panel size.

3. Design properties:

Table 1 lists the panel design capacities of LP Legacy Sub-Flooring. Additional design information is available from the manufacturer (<u>www.lpcorp.com</u>). LP Legacy Sub-Flooring shall be permitted for use as floor sheathing in accordance with an approved span rating identified in the panel trademark. Table 2 provides equivalent specific gravity values for LP Legacy Sub-Flooring for connection design using smooth-shank or screw-shank nails with a diameter of 1/4 inch or less.

4. Product installation:

LP Legacy Sub-Flooring recognized in this report shall be used in accordance with the recommendations provided by the manufacturer (see link above) and *APA Engineered Wood Construction Guide*, Form E30 (<u>www.apawood.org/resource-library</u>).

- 5. Limitations:
 - a) LP Legacy Sub-Flooring recognized in this report shall be designed in accordance with the applicable engineering practices using the design properties specified in this report and shall be permitted for use as floor sheathing in accordance with an approved span rating identified in the panel trademark.
 - b) LP Legacy Sub-Flooring is limited to dry service conditions that result in the average equilibrium moisture content of sawn lumber of less than 16 percent.

- c) LP Legacy Sub-Flooring is produced at Louisiana-Pacific Corporation facilities in the following qualified performance categories: Hanceville, Alabama and Roxboro, North Carolina – 23/32, and Sagola, Michigan – 19/32, 5/8, 23/32, 7/8 and 1-1/8.
- d) This report is subject to re-examination in one year.
- 6. Identification:

The LP Legacy Sub-Flooring described in this report is identified by a label bearing the manufacturer's name (Louisiana-Pacific Corporation) and/or trademark, the APA assigned plant number (442 for the Hanceville, AL plant, 456 for the Roxboro, NC plant, and 407 for the Sagola, MI plant), the product performance category, the APA logo, the report number PR-N127, and a means of identifying the date of manufacture.

Span	Performance Category ^(c)	Strength Axis ^(b)	Bending	Bending	Axial Stiffness,
Rating			(lbf-in. ² /ft)	(lbf-in./ft)	(lbf/ft)
	10/22	Primary	230,000	Bending Strength, FbS (lbf-in./ft) 900 500 1,000 600 1,300 750 1,800 NA 1,900 NA	5,300,000
20 o.c.	19/32	Secondary	95,000	500	3,300,000
	5/8	Primary	235,000	1,000	5,400,000
		Secondary	110,000	600	3,500,000
24 o.c.	23/32	Primary	405,000	1,300	6,100,000
		Secondary	165,000	750	3,700,000
22.0.0	7/8 Prin Seco	Primary	725,000	1,800	NA
32 0.0.		Secondary	NA	NA	5,400,000
48 o.c.	1-1/8	Primary	1,150,000	1,900	NA
		Secondary	NA	NA	4,600,000

Table 1. Panel Design Capacities for LP Legacy Sub-Flooring ^(a)

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 lbf = 0.454 kg, 1 psi = 6.9 kPa.

^(a) Design capacity is a single value that represents the product of the allowable stress and corresponding section property per 1-foot width of panel for a given load condition.

^(b) Primary strength axis corresponds to direction parallel to the panel strength axis, which is typically the panel length direction, and the secondary strength axis corresponds to the direction perpendicular to the panel strength axis, which is typically the panel width direction.

^(c) Performance Category is linked to the nominal panel thickness designations used in the International Building Code (IBC) and International Residential Code (IRC).

Span Rating	Performance Category ^(a)	Withdrawal ^(b)	Lateral ^(b)
20 o.c.	19/32 or 5/8	0.40	0.50
24 o.c.	23/32	0.44	0.50
32 o.c.	7/8	0.40	0.50
48 o.c.	1-1/8	0.40	0.50

Table 2. Equivalent Specific Gravity (ESG) for Nailed Connections with LP Legacy Sub-Flooring

^(a) Performance Category is linked to the nominal panel thickness designations used in the International Building Code (IBC) and International Residential Code (IRC).

^(b) For smooth-shank or screw-shank nails with a diameter of 1/4 in. or less.

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APA - THE ENGINEERED WOOD ASSOCIATION

HEADQUARTERS

7011 So. 19th St. • Tacoma, Washington 98466 Phone: (253) 565-6600 • Fax: (253) 565-7265 • Internet Address: <u>www.apawood.org</u>

PRODUCT SUPPORT HELP DESK

(253) 620-7400 · E-mail Address: help@apawood.org

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