

ICC-ES Evaluation Report

ESR-1251

Reissued April 1, 2011

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DIVISION: 06 00 00—WOOD, PLASTICS AND COMPOSITES
Section: 06 17 33—Wood I-joists
REPORT HOLDER:
ROSEBURG FOREST PRODUCTS COMPANY
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EVALUATION SUBJECT:
RFPI® PREFABRICATED WOOD I-JOISTS: RFPI® 20 SERIES, RFPI® 25 SERIES, RFPI® 30 SERIES, RFPI® 40 SERIES, RFPI® 400 SERIES, RFPI® 45 SERIES, RFPI® 50 SERIES, RFPI® 70 SERIES, RFPI® 90 SERIES, RFPI® 40S SERIES, RFPI® 60S SERIES, RFPI® 700 SERIES AND RFPI® 900 SERIES
1.0 EVALUATION SCOPE
Compliance with the following codes:

- 2009 *International Building Code*® (2009 IBC)
- 2009 *International Residential Code*® (2009 IRC)
- 2006 *International Building Code*® (2006 IBC)
- 2006 *International Residential Code*® (2006 IRC)

Property evaluated:

Structural

2.0 USES

RFPI® Prefabricated Wood I-Joists are prefabricated wood I-joists used as floor joists and roof rafters to support code-required loads.

3.0 DESCRIPTION
3.1 General:

The pre-fabricated wood I-joists described in this report comply with the requirements of the codes specifically referenced in Section 1.0 of this report, and are manufactured in accordance with the requirements of ASTM D 5055.

 RFPI® Prefabricated Wood I-Joists consist of laminated veneer lumber (LVL) flanges or solid sawn lumber flanges and oriented strand board (OSB) webs fabricated to form an I-shaped cross section. Top and bottom flanges are placed to create a constant-depth joist. For 9¹/₂-inch-deep (241 mm) I-joists, the web sections may be installed with the face grain (strong axis) perpendicular or parallel to the long axis of the I-joist. For all other depths, the web

sections are installed with the face grain (strong axis) perpendicular to the long axis of the I-joist. The web-to-flange joint is made by inserting the web into a groove in the center of the face of the flange member.

3.2 Material:
3.2.1 LVL Flanges: Laminated veneer lumber (LVL) flange material is manufactured by Roseburg Forest Products in accordance with the Roseburg Forest Products I-Joist Quality Control Manual. Flange dimensions are as shown in Table 3.

3.2.2 Solid Sawn Lumber Flanges; Solid sawn lumber flange material for the RFPI® 40S and RFPI® 60S is manufactured from lumber that meets the requirements noted in the Roseburg Forest Products quality control manual. The lumber is finger jointed and re-graded to the required specifications documented in the quality control manual. Flange dimensions are as shown in Table 3.

3.2.3 Webs: Webs are ³/₈- or ⁷/₁₆-inch-thick (9.5 or 11.1 mm) OSB Exposure 1 with a span rating of 24/0, conforming to U.S. Product Standard PS-2.

3.2.4 Adhesives: Adhesives used in the I-joist manufacturing process conform to the requirements of ASTM D 2559, are tested in accordance with ASTM D 7247 and meet the heat durability requirements of ASTM D 5055-07.

4.0 DESIGN AND INSTALLATION

Installation of RFPI® Prefabricated Wood I-Joists must comply with this report and the manufacturer's published installation instructions. The manufacturer's published installation instructions must be available at the jobsite at all times during installation.

4.1 General:

 Reference design values are as indicated in Tables 1 and 2 of this report. Available joist dimensions are as indicated in Table 3 of this report. Joist webs contain prefabricated 1¹/₂-inch-diameter (38 mm) knockouts, 16 inches (406 mm) on center, located approximately 2 inches (51 mm) from one flange. Round holes are permitted in the webs of the I-joist in accordance with Table 6 of this report. Allowable floor spans are as indicated in Tables 4 and 5 of this report. When web stiffeners are required, installation details must comply with Table 7 and Figure 1 of this report. Minimum bearing length for simple spans of joists must be 1³/₄ inches (44 mm). Minimum bearing length at intermediate support points for multiple-span I-joists must be 3¹/₂ inches (89 mm). When I-joists are used as simple-span members, the design shear must be equal to the end reaction.

4.2 Repetitive Member Factor:

Moment capacity of the I-joist must not be increased by any repetitive member use factor.

4.3 Lateral Support:

The compression edge of the I-joist must be laterally supported throughout its length to prevent lateral displacement. Joist ends must be restrained to prevent rollover, as by diaphragm sheathing attached to the top flange and to an end wall or shear transfer panel, or blocking or cross-bracing capable of transferring the larger of 50 pounds per foot (730 N/m) or the required shear force due to wind, seismic or soil conditions. Bridging is not required in RFPI® floor and roof joist applications.

4.4 Duration of Load:

Adjustments for duration of load provided for wood members and their connections must be in accordance with the applicable code.

4.5 In-service Moisture Conditions:

RFPI® I-joist properties and allowable loads in this report are limited to covered installations with dry conditions of use. Dry conditions of use are those environmental conditions represented by sawn lumber in which the moisture content is less than 16 percent.

4.6 Deflection:

Deflection of the joists under design load based on deflection due to bending and shear stresses related to strength of material principles must be calculated using the following formulas:

For simple span with concentrated load at mid-span:

$$D = PL^3/48EI + 2PL/K$$

For simple span with uniformly distributed load:

$$D = 5WL^4/384EI + WL^2/K$$

where:

D = Deflection (inch)

W = Uniform load (lbf/inch)

L = On-center span (inch)

K = Shear deflection coefficient from Table 1 of this report (inch-lbf/inch)

EI = Value from Table 1 of this report (lbf-in.²)

P = Concentrated load (lbf)

4.7 Fasteners:

The allowable withdrawal and lateral loads for nails installed perpendicular or parallel to the wide face of the LVL flange are the same as those provided in the applicable code for sawn lumber having a minimum specific gravity of 0.50, such as Douglas fir-larch.

The allowable withdrawal and lateral loads for nails installed perpendicular or parallel to the wide or narrow face of the solid sawn flange are based on values provided in the applicable code for lumber with a specific gravity of 0.42.

4.8 One-hour Fire-resistance-rated Floor-ceiling Assemblies:

4.8.1 Assembly 1: The I-joists described in this report, with minimum flange size of 1½ by 2½ inches (38 by 64 mm), may be used in the assembly as described in Section 4.2.2.1 of [ESR-1405](#).

4.8.2 Assembly 2: The I-joists described in this report may be used in the appropriate assembly as described in Section 4.2.2.3 of [ESR-1405](#).

4.8.3 Other Assemblies: The I-joists described in this report may be used in the assemblies described in 2009 IBC Table 720.1(3), Item Numbers 21-1.1 and 23-1.1 through 28-1.1; and in 2006 IBC Table 720.1(3), Item Numbers 21-1.1, 23-1.1 and 25-1.1 through 29-1.1; provided the I-joists used meet the required criteria as described in the tabulated "Floor or Roof Construction" column. For the purposes of the minimum flange area requirement of 2.3 square inches (1480 mm²) in Item Number 23-1.1, a 1½-by-1½ flange having a cross sectional area of 2.25 square inches (1450 mm²) may be considered sufficient.

5.0 CONDITIONS OF USE

The RFPI® Prefabricated Wood I-Joists described in this report comply with, or are suitable alternatives to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** Installation must comply with this report, the manufacturer's published installation instructions and the applicable code.
- 5.2** Allowable design properties, loads and spans for the I-joists must not exceed the values shown in Tables 1, 2, 4 and 5 of this report.
- 5.3** Design calculations and details for specific applications, demonstrating that RFPI® Prefabricated Wood I-Joists comply with this report, must be submitted to the code official. The design calculations and details for specific applications must be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where applicable, Tables 4 and 5 of this report are intended to serve as alternatives to the design calculations for member size, span, spacing and deflection.
- 5.4** Flanges must not be cut and round holes in the webs must conform to the requirements as stated in this report (See Table 6 of this report.)
- 5.5** RFPI® Prefabricated Wood I-Joists are produced in Riddle, Oregon, under a quality control program with inspections by APA—The Engineered Wood Association (AA-649).

6.0 EVIDENCE SUBMITTED

Data in accordance with the ICC-ES Acceptance Criteria for Prefabricated Wood I-Joists (AC14), dated October 2007 (editorially revised February 2010).

7.0 IDENTIFICATION

The RFPI® Prefabricated Wood I-Joists described in this report are identified by a label bearing the manufacturer's name (Roseburg Forest Products Co.) and/or trademark (see Figure 2), the plant location, the product type, the name of the inspection agency (APA—The Engineered Wood Association) and the evaluation report number (ESR-1251).

TABLE 1—REFERENCE DESIGN VALUES FOR RFPI JOISTS^{1,2}

LVL FLANGE JOIST SERIES [depth (in.) - series]	I-JOIST WEIGHT (plf)	STIFFNESS, EI (10 ⁶ lbf-in. ²)	MOMENT, M _r ³ (lbf-ft)	SHEAR, V _r (lbf)	SHEAR DEFL. COEFF., K (10 ⁶ lbf)
9 ¹ / ₂ RFPI® - 20	2.0	165	2820	1120	4.94
9 ¹ / ₂ RFPI® - 25	1.7	156	2980	1120	4.94
9 ¹ / ₂ RFPI® - 30	1.7	161	3225	1120	4.94
9 ¹ / ₂ RFPI® - 400	2.3	193	3345	1120	4.94
9 ¹ / ₂ RFPI® - 40	2.4	215	3760	1120	4.94
9 ¹ / ₂ RFPI® - 45	2.3	235	4690	1120	4.94
9 ¹ / ₂ RFPI® - 50	1.9	186	3800	1120	4.94
9 ¹ / ₂ RFPI® - 70	2.6	266	5130	1120	4.94
11 ⁷ / ₈ RFPI® - 20	2.3	283	3640	1420	6.18
11 ⁷ / ₈ RFPI® - 25	2.0	270	3860	1420	6.18
11 ⁷ / ₈ RFPI® - 30	2.0	280	4170	1420	6.18
11 ⁷ / ₈ RFPI® - 400	2.6	330	4315	1420	6.18
11 ⁷ / ₈ RFPI® - 40	2.7	366	4855	1420	6.18
11 ⁷ / ₈ RFPI® - 45	2.6	400	6075	1420	6.18
11 ⁷ / ₈ RFPI® - 50	2.2	322	4915	1420	6.18
11 ⁷ / ₈ RFPI® - 70	2.9	455	6645	1420	6.18
11 ⁷ / ₈ RFPI® - 90	3.8	676	10145	1925	6.18
14 RFPI® - 20	2.5	420	4330	1710	7.28
14 RFPI® - 400	2.8	486	5140	1710	7.28
14 RFPI® - 40	3.0	540	5785	1710	7.28
14 RFPI® - 45	2.8	592	7245	1710	7.28
14 RFPI® - 50	2.4	480	5860	1710	7.28
14 RFPI® - 70	3.1	672	7925	1710	7.28
14 RFPI® - 90	4.2	992	12100	2125	7.28
16 RFPI® - 400	3.0	665	5880	1970	8.32
16 RFPI® - 40	3.1	737	6615	1970	8.32
16 RFPI® - 45	3.0	810	8300	1970	8.32
16 RFPI® - 50	2.6	663	6715	1970	8.32
16 RFPI® - 70	3.4	918	9080	1970	8.32
16 RFPI® - 90	4.4	1350	13865	2330	8.32
SOLID SAWN FLANGE JOIST SERIES [depth (in.) - series]	I-JOIST WEIGHT (plf)	STIFFNESS, EI (10 ⁶ lbf-in. ²)	MOMENT, M_r³ (lbf-ft)	SHEAR, V_r (lbf)	SHEAR DEFL. COEFF., K (10 ⁶ lbf)
9 ¹ / ₂ RFPI® - 40S	2.6	193	2735	1120	4.94
9 ¹ / ₂ RFPI® - 60S	2.6	231	3780	1120	4.94
11 ⁷ / ₈ RFPI® - 40S	2.8	330	3545	1420	6.18
11 ⁷ / ₈ RFPI® - 60S	2.8	396	4900	1420	6.18
14 RFPI® - 40S	3.1	482	4270	1710	7.28
14 RFPI® - 60S	3.1	584	5895	1710	7.28
16 RFPI® - 40S	3.3	657	4950	1970	8.32
16 RFPI® - 60S	3.3	799	6835	1970	8.32
DEEP DEPTH LVL FLANGE JOIST SERIES [depth (in.) - series]	I-JOIST WEIGHT (plf)	STIFFNESS, EI (10 ⁶ lbf-in. ²)	MOMENT, M_r³ (lbf-ft)	SHEAR, V_r (lbf)	
18 RFPI®-700	3.9	1245	10450	2575	
18 RFPI®-900	4.8	1849	16080	2885	
20 RFPI®-700	4.1	1579	11600	2740	
20 RFPI®-900	5.2	2337	17855	2945	
22 RFPI®-700	4.4	1955	12740	2935	
22 RFPI®-900	5.5	2886	19615	3010	
24 RFPI®-700	4.6	2375	13870	3060	
24 RFPI®-900	5.7	3496	21355	3060	

For SI: 1 in. = 25.4 mm; 1 ft = 304.8 mm; 1 lbf = 4.4 N.

¹Reference design values must be adjusted in accordance with Section 7.3 of the NDS.

²Refer to Table 2a for reference design reactions and required use of web stiffeners. Adjusted design reactions must not exceed the flange bearing capacities given in Table 2b.

³Moment capacity of the I-joint must not be increased by any repetitive member use factor.

TABLE 2a—REFERENCE DESIGN REACTION VALUES, R_r, FOR RFPI JOISTS^{1,2}

LVL FLANGE JOIST SERIES [depth (in.) – series]	END REACTION (lbf)						INTERMEDIATE REACTION (lbf)				Web Stiff. Nails ⁴
	1 ³ / ₄ in. Brg. Length		3 ¹ / ₂ in. Brg. Length		4 in. Brg. Length ³		3 ¹ / ₂ in. Brg. Length		5 ¹ / ₄ in. Brg. Length		
	Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
9 ¹ / ₂ RFPI®-20	830	-	1,055	-	1,120	-	1,700	-	-	-	-
9 ¹ / ₂ RFPI®-25	830	-	1,055	-	1,120	-	1,700	-	-	-	-
9 ¹ / ₂ RFPI®-30	945	-	1,080	-	1,120	-	1,905	-	-	-	-
9 ¹ / ₂ RFPI®-400	1,025	-	1,100	-	1,120	-	2,150	-	-	-	-
9 ¹ / ₂ RFPI®-40	1,080	-	1,110	-	1,120	-	2,160	-	-	-	-
9 ¹ / ₂ RFPI®-45	1,080	-	1,110	-	1,120	-	2,160	-	-	-	-
9 ¹ / ₂ RFPI®-50	1,015	-	1,070	-	1,120	-	2,040	-	-	-	-
9 ¹ / ₂ RFPI®-70	1,120	-	1,120	-	1,120	-	2,335	-	-	-	-
11 ⁷ / ₈ RFPI®-20	830	-	1,290	-	1,420	-	1,700	-	-	-	-
11 ⁷ / ₈ RFPI®-25	830	-	1,290	-	1,420	-	1,700	-	-	-	-
11 ⁷ / ₈ RFPI®-30	945	-	1,310	-	1,420	-	1,905	-	-	-	-
11 ⁷ / ₈ RFPI®-400	1,050	-	1,340	-	1,420	-	2,250	-	-	-	-
11 ⁷ / ₈ RFPI®-40	1,200	-	1,370	-	1,420	-	2,500	-	-	-	-
11 ⁷ / ₈ RFPI®-45	1,200	-	1,370	-	1,420	-	2,500	-	-	-	-
11 ⁷ / ₈ RFPI®-50	1,015	-	1,230	-	1,420	-	2,040	-	-	-	-
11 ⁷ / ₈ RFPI®-70	1,160	-	1,360	-	1,420	-	2,335	-	-	-	-
11 ⁷ / ₈ RFPI®-90	1,400	-	1,810	1,810	1,885	1,925	3,355	-	-	-	4-10d
14 RFPI®-20	1,000	-	1,550	1,550	1,550	1,710	2,100	-	-	-	4-8d
14 RFPI®-400	1,050	-	1,550	1,565	1,550	1,710	2,250	-	-	-	4-8d
14 RFPI®-40	1,200	-	1,550	1,595	1,550	1,710	2,500	-	-	-	4-8d
14 RFPI®-45	1,200	-	1,550	1,595	1,550	1,710	2,500	-	-	-	-
14 RFPI®-50	1,015	-	1,390	1,390	1,550 ³	1,710 ³	2,040	-	-	-	-
14 RFPI®-70	1,160	-	1,550	1,590	1,550	1,710	2,335	-	-	-	4-8d
14 RFPI®-90	1,400	-	1,885	1,965	1,885	2,125	3,355	-	-	-	4-10d
16 RFPI®-400	1,050	-	1,550	1,765	1,550	1,970	2,250	-	-	-	4-8d
16 RFPI®-40	1,200	-	1,550	1,800	1,550	1,970	2,500	-	-	-	4-8d
16 RFPI®-45	1,200	-	1,550	1,800	1,550	1,970	2,500	-	-	-	-
16 RFPI®-50	1,015	-	1,530	1,530	1,550 ³	1,970 ³	2,040	-	-	-	-
16 RFPI®-70	1,160	-	1,550	1,790	1,550	1,970	2,335	-	-	-	4-8d
16 RFPI®-90	1,400	-	1,885	2,125	1,885	2,330	3,355	-	-	-	4-10d
SOLID SAWN FLANGE JOIST SERIES [depth (in.) – series]	END REACTION (lbf)						INTERMEDIATE REACTION (lbf)				Web Stiff. Nails ⁴
	1 ³ / ₄ in. Brg. Length		3 ¹ / ₂ in. Brg. Length		4 in. Brg. Length		3 ¹ / ₂ in. Brg. Length		5 ¹ / ₄ in. Brg. Length		
	Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
9 ¹ / ₂ RFPI®-40S	1,080	-	1,110	-	1,120	-	2,160	-	-	-	-
9 ¹ / ₂ RFPI®-60S	1,080	-	1,110	-	1,120	-	2,160	-	-	-	-
11 ⁷ / ₈ RFPI®-40S	1,200	-	1,370	-	1,420	-	2,500	-	-	-	-
11 ⁷ / ₈ RFPI®-60S	1,200	-	1,370	-	1,420	-	2,500	-	-	-	-
14 RFPI®-40S	1,200	-	1,550	1,595	1,550	1,710	2,500	-	-	-	4-8d
14 RFPI®-60S	1,200	-	1,550	1,595	1,550	1,710	2,500	-	-	-	4-8d
16 RFPI®-40S	1,200	-	1,550	1,800	1,550	1,970	2,500	-	-	-	4-8d
16 RFPI®-60S	1,200	-	1,550	1,800	1,550	1,970	2,500	-	-	-	4-8d
DEEP DEPTH LVL FLANGE JOIST SERIES [depth (in.) – series]	END REACTION (lbf)						INTERMEDIATE REACTION (lbf)				Web Stiff. Nails ⁴
	1 ³ / ₄ in. Brg. Length		3 ¹ / ₂ in. Brg. Length		4 in. Brg. Length		3 ¹ / ₂ in. Brg. Length		5 ¹ / ₄ in. Brg. Length		
	Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		Web Stiffeners		
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	
18 RFPI®-700	1,125	2,200	1,650	2,575	1,800	2,575	2,745	4,050	3,025	4,475	8-8d
18 RFPI®-900	1,475	2,570	1,765	2,885	1,850	2,885	3,000	5,110	3,475	5,710	8-16d
20 RFPI®-700	1,090	2,300	1,585	2,740	1,725	2,740	2,745	4,050	3,025	4,475	8-8d
20 RFPI®-900	1,350	2,665	1,700	2,945	1,800	2,945	3,000	5,110	3,475	5,710	8-16d
22 RFPI®-700	N.A.	2,400	N.A.	2,935	N.A.	2,935	N.A.	4,150	N.A.	4,605	10-8d
22 RFPI®-900	N.A.	2,755	N.A.	3,010	N.A.	3,010	N.A.	5,405	N.A.	6,020	10-16d
24 RFPI®-700	N.A.	2,500	N.A.	3,060	N.A.	3,060	N.A.	4,150	N.A.	4,605	10-8d
24 RFPI®-900	N.A.	2,850	N.A.	3,060	N.A.	3,060	N.A.	5,405	N.A.	6,020	10-16d

For SI: 1 in. = 25.4 mm; 1 lbf = 4.4 N.

¹Reference design reaction values must be adjusted in accordance with Section 7.3 of the NDS; however, adjusted design values must not exceed the allowable flange bearing capacities based on compression perpendicular-to-grain, as given in Table 2b.

²Tabulated values may be interpolated for bearing lengths between those given.

³The values in these columns require a minimum bearing length of 5 inches for the 14- and 16-inch-deep RFPI® 50.

⁴Number of nails required for web stiffeners (where web stiffeners are required). Web stiffeners must be installed in accordance with Table 7, Figure 1, and the recommendations provided by the manufacturer.

TABLE 2b—ALLOWABLE FLANGE BEARING CAPACITIES BASED ON COMPRESSION PERPENDICULAR-TO-GRAIN^{1,2,3}

Depth	Joist Designation	END REACTION (lbf)			INTERMEDIATE REACTION (lbf)	
		1 ³ / ₄ in. Brg. Length	3 ¹ / ₂ in. Brg. Length	4 in. Brg. Length	3 ¹ / ₂ in. Brg. Length	5 ¹ / ₄ in. Brg. Length
All Depths in each Series	RFPI®-20	1,415	2,830	3,230	3,130	4,545
	RFPI®-25	1,195	2,390	2,730	2,645	3,845
	RFPI®-30	1,195	2,390	2,730	2,645	3,845
	RFPI®-400	1,685	3,375	3,855	3,735	5,425
	RFPI®-40	1,905	3,810	4,355	4,220	6,130
	RFPI®-45	1,905	3,810	4,355	4,220	6,130
	RFPI®-50	1,415	2,830	3,230	3,130	4,545
	RFPI®-70	1,905	3,810	4,355	4,220	6,130
	RFPI®-90	2,945	5,890	6,730	6,520	9,470
	RFPI®-40S	1,760	3,520	4,020	3,895	5,655
	RFPI®-60S	2,175	4,350	4,970	4,815	6,990
	RFPI®-700	2,285	4,575	5,230	5,065	7,355
	RFPI®-900	3,535	7,070	8,080	7,825	11,365

For SI: 1 in. = 25.4 mm; 1 lbf = 4.4 N.

¹Adjusted design reaction values for RFPI I-joists must be determined in accordance with Table 2a (previous page), but must not exceed the allowable flange bearing capacities given in Table 2b (above).

²Allowable flange bearing capacities given in Table 2b must not be adjusted by any load duration factor.

³Tabulated values may be interpolated for bearing lengths between those given.

TABLE 3—JOIST DIMENSIONS

LVL FLANGE JOIST SERIES [depth (in.) - series]	NET JOIST DEPTH (in.)	FLANGE		WEB
		Width (in.)	Thickness (in.)	Thickness (in.)
9 ¹ / ₂ RFPI® - 20	9 ¹ / ₂	1 ³ / ₄	1 ³ / ₈	3 ³ / ₈
9 ¹ / ₂ RFPI® - 25	9 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
9 ¹ / ₂ RFPI® - 30	9 ¹ / ₂	1 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
9 ¹ / ₂ RFPI® - 400	9 ¹ / ₂	2 ¹ / ₁₆	1 ³ / ₈	3 ³ / ₈
9 ¹ / ₂ RFPI® - 40	9 ¹ / ₂	2 ⁵ / ₁₆	1 ³ / ₈	3 ³ / ₈
9 ¹ / ₂ RFPI® - 45	9 ¹ / ₂	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
9 ¹ / ₂ RFPI® - 50	9 ¹ / ₂	1 ³ / ₄	1 ¹ / ₂	3 ³ / ₈
9 ¹ / ₂ RFPI® - 70	9 ¹ / ₂	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 20	11 ⁷ / ₈	1 ³ / ₄	1 ³ / ₈	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 25	11 ⁷ / ₈	1 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 30	11 ⁷ / ₈	1 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 400	11 ⁷ / ₈	2 ¹ / ₁₆	1 ³ / ₈	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 40	11 ⁷ / ₈	2 ⁵ / ₁₆	1 ³ / ₈	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 45	11 ⁷ / ₈	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 50	11 ⁷ / ₈	1 ³ / ₄	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 70	11 ⁷ / ₈	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 90	11 ⁷ / ₈	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
14 RFPI® - 20	14	1 ³ / ₄	1 ³ / ₈	3 ³ / ₈
14 RFPI® - 400	14	2 ¹ / ₁₆	1 ³ / ₈	3 ³ / ₈
14 RFPI® - 40	14	2 ⁵ / ₁₆	1 ³ / ₈	3 ³ / ₈
14 RFPI® - 45	14	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
14 RFPI® - 50	14	1 ³ / ₄	1 ¹ / ₂	3 ³ / ₈
14 RFPI® - 70	14	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
14 RFPI® - 90	14	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
16 RFPI® - 400	16	2 ¹ / ₁₆	1 ³ / ₈	3 ³ / ₈
16 RFPI® - 40	16	2 ⁵ / ₁₆	1 ³ / ₈	3 ³ / ₈
16 RFPI® - 45	16	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
16 RFPI® - 50	16	1 ³ / ₄	1 ¹ / ₂	3 ³ / ₈
16 RFPI® - 70	16	2 ⁵ / ₁₆	1 ¹ / ₂	3 ³ / ₈
16 RFPI® - 90	16	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
SOLID SAWN FLANGE JOIST SERIES [depth (in.) - series]	NET JOIST DEPTH (in.)	FLANGE		WEB
		Width (in.)	Thickness (in.)	Thickness (in.)
9 ¹ / ₂ RFPI® - 40S	9 ¹ / ₂	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
9 ¹ / ₂ RFPI® - 60S	9 ¹ / ₂	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 40S	11 ⁷ / ₈	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
11 ⁷ / ₈ RFPI® - 60S	11 ⁷ / ₈	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
14 RFPI® - 40S	14	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
14 RFPI® - 60S	14	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
16 RFPI® - 40S	16	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
16 RFPI® - 60S	16	2 ¹ / ₂	1 ¹ / ₂	3 ³ / ₈
DEEP DEPTH LVL FLANGE JOIST SERIES [depth (in.) - series]	NET JOIST DEPTH (in.)	FLANGE		WEB
		Width (in.)	Thickness (in.)	Thickness (in.)
18 RFPI®-700	18	2 ⁵ / ₁₆	1 ¹ / ₂	7 ¹ / ₁₆
18 RFPI®-900	18	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
20 RFPI®-700	20	2 ⁵ / ₁₆	1 ¹ / ₂	7 ¹ / ₁₆
20 RFPI®-900	20	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
22 RFPI®-700	22	2 ⁵ / ₁₆	1 ¹ / ₂	7 ¹ / ₁₆
22 RFPI®-900	22	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆
24 RFPI®-700	24	2 ⁵ / ₁₆	1 ¹ / ₂	7 ¹ / ₁₆
24 RFPI®-900	24	3 ¹ / ₂	1 ¹ / ₂	7 ¹ / ₁₆

For SI: 1 in. = 25.4 mm.

TABLE 4—ALLOWABLE SPAN LENGTH—SIMPLE SPANS^{1,2, 3,4,5}

LVL FLANGE JOIST SERIES [depth (in.) - series]	ON-CENTER SPACING (in.)			
	12	16	19.2	24
9 ¹ / ₂ RFPI® - 20	17'-2"	15'-9"	14'-10"	13'-10"
9 ¹ / ₂ RFPI® - 25	17'-0"	15'-6"	14'-8"	13'-9"
9 ¹ / ₂ RFPI® - 30	17'-1"	15'-8"	14'-10"	13'-10"
9 ¹ / ₂ RFPI® - 400	18'-0"	16'-5"	15'-6"	14'-6"
9 ¹ / ₂ RFPI® - 40	18'-7"	16'-11"	16'-0"	14'-11"
9 ¹ / ₂ RFPI® - 45	19'-1"	17'-5"	16'-5"	15'-4"
9 ¹ / ₂ RFPI® - 50	17'-10"	16'-4"	15'-5"	14'-5"
9 ¹ / ₂ RFPI® - 70	19'-9"	18'-0"	17'-0"	15'-10"
11 ⁷ / ₈ RFPI® - 20	20'-6"	18'-9"	17'-9"	16'-5"
11 ⁷ / ₈ RFPI® - 25	20'-3"	18'-7"	17'-6"	16'-5"
11 ⁷ / ₈ RFPI® - 30	20'-6"	18'-9"	17'-8"	16'-6"
11 ⁷ / ₈ RFPI® - 400	21'-5"	19'-7"	18'-6"	17'-3"
11 ⁷ / ₈ RFPI® - 40	22'-1"	20'-2"	19'-0"	17'-9"
11 ⁷ / ₈ RFPI® - 45	22'-8"	20'-9"	19'-7"	18'-3"
11 ⁷ / ₈ RFPI® - 50	21'-4"	19'-6"	18'-5"	17'-2"
11 ⁷ / ₈ RFPI® - 70	23'-7"	21'-6"	20'-3"	18'-10"
11 ⁷ / ₈ RFPI® - 90	26'-6"	24'-1"	22'-8"	21'-1"
14 RFPI® - 20	23'-4"	21'-4"	20'-2"	18'-6"
14 RFPI® - 400	24'-4"	22'-3"	21'-0"	19'-7"
14 RFPI® - 40	25'-2"	22'-11"	21'-8"	20'-2"
14 RFPI® - 45	25'-10"	23'-7"	22'-3"	20'-9"
14 RFPI® - 50	24'-4"	22'-2"	21'-0"	19'-7"
14 RFPI® - 70	26'-10"	24'-5"	23'-0"	21'-5"
14 RFPI® - 90	30'-1"	27'-5"	25'-9"	23'-11"
16 RFPI® - 400	27'-0"	24'-8"	23'-4"	20'-10"
16 RFPI® - 40	27'-10"	25'-5"	24'-0"	22'-4"
16 RFPI® - 45	28'-8"	26'-2"	24'-8"	23'-0"
16 RFPI® - 50	27'-0"	24'-8"	23'-4"	20'-2"
16 RFPI® - 70	29'-9"	27'-1"	25'-6"	23'-1"
16 RFPI® - 90	33'-4"	30'-4"	28'-7"	26'-7"
SOLID SAWN FLANGE JOIST SERIES [depth (in.) - series]	ON-CENTER SPACING (in.)			
	12	16	19.2	24
9 ¹ / ₂ RFPI® - 40S	18'-0"	16'-5"	15'-6"	14'-6"
9 ¹ / ₂ RFPI® - 60S	18'-11"	17'-4"	16'-4"	15'-3"
11 ⁷ / ₈ RFPI® - 40S	21'-5"	19'-7"	18'-6"	16'-8"
11 ⁷ / ₈ RFPI® - 60S	22'-7"	20'-8"	19'-6"	18'-2"
14 RFPI® - 40S	24'-4"	22'-3"	20'-6"	18'-4"
14 RFPI® - 60S	25'-9"	23'-6"	22'-2"	20'-8"
16 RFPI® - 40S	26'-11"	24'-3"	22'-1"	19'-9"
16 RFPI® - 60S	28'-6"	26'-0"	24'-7"	22'-11"

For SI: 1 in. = 25.4 mm; 1 ft = 304.8 mm; 1 lbf = 4.4 N.

¹Allowable clear span applicable to simple-span residential floor construction with a design dead load of 10 psf and a live load of 40 psf. The live load deflection is limited to L/480.

²Spans are based on a composite floor with glue-nailed sheathing meeting the requirements for APA Rated Sheathing or APA Rated STURD-I-FLOOR conforming to PS 1 or PS 2, with a minimum thickness of 19/32 inch for a joist spacing of 19.2 inches or less, or 23/32 inch for a joist spacing of 24 inches. Spans must be reduced 12 inches when the floor sheathing is nailed only.

³Minimum bearing length must be 1 3/4 inches for the end bearings.

⁴Span lengths are based on uniform loads.

⁵Allowable spans for the RFPI® 700 and RFPI® 900 series I-joists are outside the scope of this evaluation report. Contact the report holder (Roseburg Forest Products Company) regarding allowable spans for these two series.

TABLE 5—ALLOWABLE SPAN LENGTH—MULTIPLE SPANS^{1,2,3,4,5}

LVL FLANGE JOIST SERIES [depth (in.) - series]	ON-CENTER SPACING (in.)			
	12	16	19.2	24
9 ¹ / ₂ RFPI® - 20	18'-9"	17'-1"	16'-2"	13'-5"
9 ¹ / ₂ RFPI® - 25	18'-6"	16'-11"	15'-11"	13'-5"
9 ¹ / ₂ RFPI® - 30	18'-7"	17'-0"	16'-1"	15'-0"
9 ¹ / ₂ RFPI® - 400	19'-7"	17'-10"	16'-10"	15'-9"
9 ¹ / ₂ RFPI® - 40	20'-2"	18'-5"	17'-5"	16'-2"
9 ¹ / ₂ RFPI® - 45	20'-9"	18'-11"	17'-10"	16'-8"
9 ¹ / ₂ RFPI® - 50	19'-5"	17'-9"	16'-9"	15'-7"
9 ¹ / ₂ RFPI® - 70	21'-6"	19'-7"	18'-5"	17'-2"
11 ⁷ / ₈ RFPI® - 20	22'-4"	20'-2"	16'-9"	13'-5"
11 ⁷ / ₈ RFPI® - 25	22'-1"	20'-2"	16'-9"	13'-5"
11 ⁷ / ₈ RFPI® - 30	22'-4"	20'-5"	18'-10"	15'-0"
11 ⁷ / ₈ RFPI® - 400	23'-4"	21'-4"	20'-1"	17'-9"
11 ⁷ / ₈ RFPI® - 40	24'-1"	22'-0"	20'-8"	19'-3"
11 ⁷ / ₈ RFPI® - 45	24'-9"	22'-7"	21'-3"	19'-9"
11 ⁷ / ₈ RFPI® - 50	23'-3"	21'-2"	20'-0"	16'-1"
11 ⁷ / ₈ RFPI® - 70	25'-8"	23'-5"	22'-0"	18'-6"
11 ⁷ / ₈ RFPI® - 90	28'-10"	26'-3"	24'-8"	22'-11"
14 RFPI® - 20	25'-5"	22'-7"	20'-7"	16'-7"
14 RFPI® - 400	26'-7"	24'-3"	22'-3"	17'-9"
14 RFPI® - 40	27'-5"	25'-0"	23'-7"	19'-9"
14 RFPI® - 45	28'-2"	25'-8"	24'-3"	19'-9"
14 RFPI® - 50	26'-6"	24'-2"	20'-2"	16'-1"
14 RFPI® - 70	29'-3"	26'-7"	23'-2"	18'-6"
14 RFPI® - 90	32'-10"	29'-10"	28'-1"	26'-0"
16 RFPI® - 400	29'-6"	26'-4"	22'-3"	17'-9"
16 RFPI® - 40	30'-4"	27'-8"	24'-9"	19'-9"
16 RFPI® - 45	31'-3"	28'-6"	24'-9"	19'-9"
16 RFPI® - 50	29'-6"	24'-3"	20'-2"	16'-1"
16 RFPI® - 70	32'-5"	27'-10"	23'-2"	18'-6"
16 RFPI® - 90	36'-5"	33'-1"	31'-1"	26'-7"
SOLID SAWN FLANGE JOIST SERIES [depth (in.) - series]	ON-CENTER SPACING (in.)			
	12	16	19.2	24
9 ¹ / ₂ RFPI® - 40S	19'-7"	17'-11"	16'-4"	14'-7"
9 ¹ / ₂ RFPI® - 60S	20'-8"	18'-10"	17'-9"	16'-6"
11 ⁷ / ₈ RFPI® - 40S	23'-5"	20'-5"	18'-7"	16'-7"
11 ⁷ / ₈ RFPI® - 60S	24'-8"	22'-6"	21'-2"	19'-7"
14 RFPI® - 40S	25'-11"	22'-5"	20'-5"	18'-3"
14 RFPI® - 60S	28'-0"	25'-7"	24'-1"	19'-9"
16 RFPI® - 40S	27'-11"	24'-2"	22'-0"	19'-8"
16 RFPI® - 60S	31'-1"	28'-4"	24'-9"	19'-9"

For SI: 1 in. = 25.4 mm; 1 ft = 304.8 mm; 1 lbf = 4.4 N.

¹Allowable clear span applicable to multiple-span residential floor construction with a design dead load of 10 psf and a live load of 40 psf. The length of the end span must be 40% or more of the adjacent span. The live load deflection is limited to L/480.

²Spans are based on a composite floor with glue-nailed sheathing meeting the requirements for APA Rated Sheathing or APA Rated STURD-I-FLOOR conforming to PS 1 or PS 2, with a minimum thickness of 19/32 inch for a joist spacing of 19.2 inches or less, or 23/32 inch for a joist spacing of 24 inches. Spans must be reduced 12 inches when the floor sheathing is nailed only.

³Minimum bearing length must be 1 3/4 inches for the end bearings and 3 1/2 inches for the intermediate bearings.

⁴Span lengths are based on uniform loads.

⁵Allowable spans for the RFPI® 700 and RFPI® 900 series I-joists are outside the scope of this evaluation report. Contact the report holder (Roseburg Forest Products Company) regarding allowable spans for these two series.

TABLE 6—CIRCULAR HOLE PLACEMENT^{1,2,3,4}

JOIST SERIES [depth (in.) – series]	MINIMUM DISTANCE FROM INSIDE FACE OF ANY SUPPORT TO CENTER OF HOLE (feet - inches)															
	Round Hole Diameter (in.)															
	2	3	4	5	6	6 ¹ / ₄	7	8	8 ⁵ / ₈	9	10	10 ³ / ₄	11	12	12 ³ / ₄	
9 ¹ / ₂ RFPI-20	0-7	0-11	2-3	3-11	5-8	6-1										
9 ¹ / ₂ RFPI-25	0-7	0-11	2-2	3-9	5-6	5-11										
9 ¹ / ₂ RFPI-30	0-9	2-0	3-3	4-7	6-1	6-6										
9 ¹ / ₂ RFPI-400	1-3	2-6	3-9	5-2	6-8	7-1										
9 ¹ / ₂ RFPI-40	1-6	2-9	4-1	5-6	7-0	7-5										
9 ¹ / ₂ RFPI-40S	0-7	1-8	3-0	4-4	5-9	6-3										
9 ¹ / ₂ RFPI-45	1-10	3-1	4-5	5-10	7-4	7-9										
9 ¹ / ₂ RFPI-50	1-1	2-4	3-8	5-0	6-6	6-11										
9 ¹ / ₂ RFPI-60S	1-8	3-0	4-4	5-8	7-3	7-8										
9 ¹ / ₂ RFPI-70	2-2	3-5	4-9	6-2	7-9	8-2										
11 ⁷ / ₈ RFPI-20	0-7	0-8	0-8	0-9	2-4	2-10	4-3	6-4	7-9							
11 ⁷ / ₈ RFPI-25	0-7	0-8	0-8	0-9	2-4	2-10	4-3	6-4	7-9							
11 ⁷ / ₈ RFPI-30	0-7	0-8	0-8	1-9	3-4	3-9	5-0	6-10	8-0							
11 ⁷ / ₈ RFPI-400	0-7	0-8	1-11	3-2	4-7	4-11	6-0	7-9	9-0							
11 ⁷ / ₈ RFPI-40	0-7	1-8	2-11	4-3	5-7	5-11	7-1	8-8	9-9							
11 ⁷ / ₈ RFPI-40S	0-7	0-8	1-2	2-5	3-9	4-1	5-1	6-8	7-11							
11 ⁷ / ₈ RFPI-45	0-9	2-0	3-3	4-7	6-0	6-4	7-5	9-0	10-1							
11 ⁷ / ₈ RFPI-50	0-7	0-8	0-11	2-6	4-1	4-6	5-10	7-8	8-11							
11 ⁷ / ₈ RFPI-60S	0-8	1-10	3-2	4-5	5-10	6-2	7-4	8-11	10-0							
11 ⁷ / ₈ RFPI-70	0-7	1-2	2-5	3-10	5-6	5-11	7-3	9-2	10-6							
11 ⁷ / ₈ RFPI-90	0-7	0-8	1-9	3-6	5-3	5-9	7-2	9-3	10-7							
14 RFPI-20	0-7	0-8	0-8	0-9	0-10	1-3	2-5	4-1	5-2	5-10	7-8	9-5				
14 RFPI-400	0-7	0-8	0-8	0-9	1-11	2-4	3-7	5-3	6-4	7-0	8-11	10-8				
14 RFPI-40	0-7	0-8	0-8	1-7	2-10	3-2	4-5	6-2	7-3	8-0	10-0	11-7				
14 RFPI-40S	0-7	0-8	0-8	0-9	1-10	2-2	3-2	4-7	5-5	6-0	7-7	9-4				
14 RFPI-45	0-7	0-8	0-8	1-8	3-3	3-8	4-11	6-8	7-9	8-6	10-6	12-1				
14 RFPI-50	0-7	0-8	0-8	0-9	0-9	1-1	2-6	4-6	5-9	6-7	8-10	10-7				
14 RFPI-60S	0-7	0-8	0-8	1-7	3-2	3-6	4-9	6-6	7-8	8-4	10-4	11-11				
14 RFPI-70	0-7	0-8	0-8	0-11	2-6	2-11	4-2	6-2	7-6	8-4	10-7	12-6				
14 RFPI-90	0-7	0-8	1-3	2-10	4-6	4-11	6-2	7-11	9-1	9-10	11-10	13-6				
16 RFPI-400	0-7	0-8	0-8	0-9	0-9	0-10	0-10	1-11	3-1	3-10	5-11	7-6	8-0	10-4	12-3	
16 RFPI-40	0-7	0-8	0-8	0-9	0-9	0-10	1-10	3-6	4-6	5-2	6-11	8-5	9-0	11-4	13-3	
16 RFPI-40S	0-7	0-8	0-8	0-9	0-9	0-10	1-5	2-9	3-7	4-1	5-6	6-7	7-0	8-9	10-9	
16 RFPI-45	0-7	0-8	0-8	0-9	0-9	0-10	1-10	3-6	4-7	5-4	7-5	9-0	9-7	12-0	13-11	
16 RFPI-50	0-7	0-8	0-8	0-9	0-9	0-10	0-10	0-10	1-9	2-6	4-6	6-0	6-8	9-7	11-11	
16 RFPI-60S	0-7	0-8	0-8	0-9	0-9	0-10	1-10	3-6	4-6	5-2	7-3	8-11	9-6	11-10	13-9	
16 RFPI-70	0-7	0-8	0-8	0-9	0-9	0-10	1-0	2-11	4-1	4-10	6-11	8-7	9-1	11-8	14-2	
16 RFPI-90	0-7	0-8	0-8	0-10	2-3	2-8	3-10	5-5	6-6	7-4	9-5	11-1	11-8	14-1	16-1	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8mm.

¹Tabulated values are for simple or multiple spans, based on 40 psf live load and 10 psf dead load, and I-joist spacing of 24 inches on center or less with the full shear design values given in Table 1 of this report.

²Distances are based on uniformly loaded joists that meet the span requirements in Tables 4 and 5 of this report.

³For webs with multiple holes, the minimum allowable center-to-center hole spacing is 3D, where D is the diameter of the larger hole.

⁴The allowable location of round holes for the RFPI[®] 700 and RFPI[®] 900 series of I-joists may be determined by utilizing the following equation to calculate the allowable shear capacity of the I-joist with a given hole size: $V_{hole} = V_r \times \{(joist\ depth - hole\ diameter) / joist\ depth\}$

Where: V_{hole} is the allowable shear at the centerline of the hole (lbf)
 V_r is the allowable shear value for the I-joist as given in Table 1 (lbf)
 Joist depth is the out-to-out depth of the I-joist (in)
 Hole diameter is in inches.

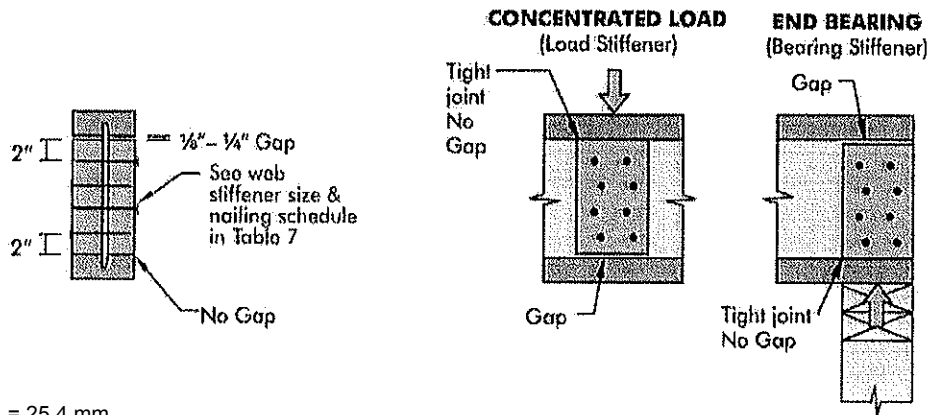
TABLE 7—MINIMUM WEB STIFFENER DIMENSIONS AND NAILING REQUIREMENTS

LVL FLANGE JOIST SERIES	FLANGE WIDTH (in.)	MINIMUM DIMENSIONS AND NAILING REQUIREMENTS		
		Web Stiffener Dimensions (in.)		Nails
		Thickness	Width	
RFPI® - 20	1 ³ / ₄	19 ¹ / ₃₂	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 25	1 ¹ / ₂	15 ¹ / ₃₂	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 30	1 ¹ / ₂	15 ¹ / ₃₂	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 400	2 ¹ / ₁₆	7 ¹ / ₈	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 40	2 ⁵ / ₁₆	1	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 45	2 ⁵ / ₁₆	1	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 50	1 ³ / ₄	19 ¹ / ₃₂	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 70	2 ⁵ / ₁₆	1	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 90	3 ¹ / ₂	1 ¹ / ₂	2 ⁵ / ₁₆	10d box – 3 x 0.128 inch

SOLID SAWN FLANGE JOIST SERIES	FLANGE WIDTH (in.)	MINIMUM DIMENSIONS AND NAILING REQUIREMENTS		
		Web Stiffener Dimensions (in.)		Nails
		Thickness (in)	Width (in)	
RFPI® - 40S	2 ¹ / ₂	1	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 60S	2 ¹ / ₂	1	2 ⁵ / ₁₆	8d box – 2 ¹ / ₂ x 0.113 inch

DEEP DEPTH LVL FLANGE JOIST SERIES	FLANGE WIDTH (in.)	MINIMUM DIMENSIONS AND NAILING REQUIREMENTS		
		Web Stiffener Dimensions (in.)		Nails
		Thickness (in)	Width (in)	
RFPI® - 700	2 ⁵ / ₁₆	7 ¹ / ₈	3 ¹ / ₂	8d box – 2 ¹ / ₂ x 0.113 inch
RFPI® - 900	3 ¹ / ₂	1 ¹ / ₂	3 ¹ / ₂	16d box – 3 ¹ / ₂ x 0.135 inch

For SI: 1 in. = 25.4 mm.



For SI: 1 in. = 25.4 mm.

FIGURE 1—WEB STIFFENER DIAGRAM (See Table 7 for stiffener size and nailing requirements)



FIGURE 2—PRODUCT LOGOS