NYC BUILDINGS

NYC Department of Buildings
280 Broadway, New York, NY 10007
Patricia Lancaster, FAIA, Commissioner
(212) 566-5000, TTY: (212) 566-4769

Report of Materials and Equipment Acceptance Division

Pursuant to Administrative Code Section 27-131, the following equipment or material has been found acceptable for use subject to the terms and conditions contained herein.

MEA 96-94-E Vol. VIII

1.0 MANUFCATURER

LOUISIANA-PACIFIC CORPORATION
2706 HIGHWAY 421 NORTH
WILMINGTON, NORTH CAROLINA 28401
910.762.9878
www.lpcorp.com

2.0 TRADE NAME

LPI AND TLI™ SERIES WOOD I-JOISTS AND RIM BOARDS

3.0 PRODUCT

Wooden I-joists, with flanges made of structural composite lumber (SCL) or kiln-dried, solid sawn lumber and webs of oriented strand board structural panels. The I-joist series and depths are given in Tables 1 to 4.

4.0 USES

LPI and TLI Wood I-Joists are intended for structural applications such as, but not limited to, floor joists, roof joists, blocking panels and rim joists.

5.0 DESCRIPTION

5.1 Pertinent Code Sections

Pertinent code sections for the LPI and TLI Wood I-Joists are: Article 7 Wood, Section 27-617 and Reference Standard RS-10, Section 27-133 Alternate or Equivalent Material.

5.2 General

The LPI and TLI Wood I-Joists have structural wood flanges and a single web as specified in the approved Quality Assurance Manual (herein referred to as the Manual) that contains the manufacturing standards. Web sections are end-jointed together to form a continuous web. Web end joints shall be of the types specified in the Manual. The web-flange connection is made by inserting the beveled edge of the web into a groove centered in the wide face of the flange member.

The flange sizes, depths and manufacturing tolerances of the I-joists shall be as specified in the Manual.

5.3 Materials

5.3.1 Flanges

The flange material is structural composite lumber (SCL) or solid-sawn lumber that meets the requirements noted in the Manual.

5.3.2 Webs

Webs for all series, except for the LPI 56A and LPI 550 Series I-joists, shall be at least 3/8 inches (9.5 mm) thick. Webs for the LPI 56A and LPI 550 Series I-joists shall be at least 7/16 inches (11.1 mm) thick. All web panels shall comply with U.S. Voluntary Product Standard PS 2-92 and the Manual.

5.3.3 Adhesive

Adhesives are exterior wet-use types complying with ASTM D2559 and shall be of the types specified in the Manual.

5.3.4 Quality Assurance Manuals

All LPI and TLI Wood I-Joists are manufactured under a strict Quality Assurance Program outlined in the below Quality Assurance Manuals:

1. Quality Assurance Manual, I-Joist Products.

6.0 DESIGN AND INSTALLATION

6.1 Design

The LPI and TLI Series I-Joists shall be designed in accordance with Tables 1 to 15 of this report, except that appropriate design load(s), deflection limitation(s) and other performance standards of the New York City Building Code shall apply. The following conditions also apply:

1. Web stiffeners are optional when the LPI and TLI Wood I-joists are designed in accordance with Tables 1 to 15, except when any of the following conditions are encountered:
   a. Bird's mouth cuts. See Figure 9, Detail 6.
   b. Where sloped joist hangers support I-joists.
   c. Where joist hangers do not laterally support the I-joist's top flange.
   d. When required by Tables 1 to 4 due to actual reaction loads.
2. The repetitive-member use factors applicable to the resistive moments given in Tables 1 and 2 are limited to 1.0. The tabulated maximum resistive moments given in Tables 3 and 4 for I-joist repetitive members, as defined in Part 7.3.6 of the AF&PA NDS, may be increased by 4 percent for SCL flanges, and 7 percent for solid-sawn flanges.
3. An analytical approach for the location and size of web holes, including use of the LP design software, can be used in lieu of the hole chart tables or web hole equations noted in this report, provided the hole calculations are reviewed and approved by a professional engineer. Size and location of allowable web holes are noted in Tables 7 to 10 for LPI I-joists and in Tables 11 to 13 for TLI I-joists. Web hole equations are noted in Table 6 for LPI joists and Table 14 for TLI joists. If the engineer uses the LP design software for web hole design, the engineer must provide proper reference to the software. Figures 2 and 3 show the web hole drawings.
4. Equivalent specific gravity for fastener design shall be 0.42 for the solid-sawn wood flanges. The spacing of fasteners installed in the solid-sawn wood flanges shall comply with

the spacing set forth in the applicable code for fasteners installed in sawn lumber. Equivalent specific gravity for fastener design and the spacing of fasteners installed in the SCL flanges shall comply with MEA 97-94-E. Equivalent specific gravity for fastener design and the spacing of fasteners installed in the Gang-Lam (Maritime Pine veneer) SCL manufactured by Louisiana-Pacific Corporation shall be as set forth in MEA 97-94-E for Gang-Lam S SCL.

6.2 LPI I-Joist Rim Board Applications

The LPI I-joists are recognized for use as rim boards as shown in Figure 5, Detail 2. For the purpose of this report, rim boards are defined as continuously supported structural members, either located at the joist elevation in an end bearing wall or located parallel to the joist framing, that are the full depth of the joist space and are used for any of the following purposes:

1. Transfer, from above to below, of all vertical loads at the rim board location. Allowable vertical loads are noted in Table 15.
2. Transferring in-plane lateral loads of a maximum of 200 pounds of force per linear foot (2920 N/m) from the diaphragm to the wall plate below. See Figure 5 for shear transfer details.
3. Providing diaphragm attachment (sheathing to the top edge of rim board).
4. Providing lateral support to the joist or rafter (resistance against rotation) through attachment to the joist or rafter.
5. Providing closure for ends of joists or rafters.
6. Providing attachment base for siding or exterior deck ledger.
7. I-joists used as blocking panels are installed between I-joists and have a maximum applicable vertical capacity as shown in Table 15 of this report.

6.3 Installation

LPI and TLI Series Wood I-Joists are installed using details shown in Figures 1 to 9 of this report.

1. The compression flange requires continuous lateral support, and the joist ends require restraint to prevent rollover. Methods specified in the applicable code for lateral support of sawn lumber are acceptable.
2. Sheathing attachment to the I-joist flanges shall meet the requirements given in 6.1 #4 of this report.
3. I-joist attachment to supports shall meet the requirements given in 6.1 #4 of this report.
4. Bridging shall be installed as shown on the plans. Bracing is required during construction in accordance with the manufacturer's instructions.
5. The material, size, and attachment of web reinforcement shall be as illustrated and described in Figure 1 and Table 5 of this report.
6. Details are directed towards proper installation of all LPI wood I-joists. Other considerations, such as diaphragm connections, nailing and load transfers, require supplementary consideration by the responsible engineer.
7. Handling and Storage:
   a. Unload I-joists carefully, by lifting. Support the bundles to reduce excessive bowing. Individual I-joists should be handled in a manner that prevents physical damage to the I-joist during measuring, cutting, erection, etc. I-joists should be handled vertically and not flatwise.
   b. I-joists should remain stored in wrapped and strapped bundles, stacked no more than 12 feet high, using blocking supports between bundles spaced no more than 10 feet apart.
   c. I-joists must not be stored in contact with the ground, or have prolonged exposure to the weather.
   d. When I-joists are stored out of doors or exposed to wet weather conditions during construction, the user shall inspect I-joists for flange-web separation, swelling and warping and replaced if so damaged.

7.0 IDENTIFICATION

The LPI and TLI Series Wood I-Joists shall be identified with the Louisiana-Pacific Corporation name or logo; the inspection agency name or logo; the report number (MEA 96-94-E); the mill number; product designation and the date of fabrication.

8.0 EVIDENCE SUBMITTED

Tests - Flange Tension and MOE Tests; I-joist EI and Moment Capacity Tests, Shear Capacity Tests, Creep Behavior Tests, Multiple Span Bearing Capacity Tests, Minimum End Bearing Tests, Round Web Opening Shear Capacity Tests, and Rectangular Web Opening Shear Capacity Tests.

Laboratory - In-house testing was performed by Louisiana-Pacific Corporation and was witnessed by a representative of PFS Corporation. Tables and drawings contained in this report were prepared by Louisiana-Pacific Corporation and sealed by Daniel Michael McGee, P.E., New York State License No. 04103.

In-house flange tension tests for the TLI Series I-Joists were conducted at Tecton Laminates Corporation in Hines, OR and were witnessed by PFS Corporation. Interior and End Reaction tests were conducted at Washington State University Wood Materials and Engineering Laboratory in Pullman, WA and were witnessed by PFS Corporation.

Stiffness Capacity tests with multiple holes were conducted at the American Plywood Association in Tacoma, WA. All other tests were conducted at the Web Joists Corporation in Chehalis, WA and were witnessed by the PFS Corporation.

Test Reports for LPI wood I-joists are as follows:

1. Vol. I. General Specifications, Test Reports and Sample Calculations and Data for LPI Joists.
2. Vol. IV. Shear Capacity Test Reports and Data for LPI Joists.
3. Vol. V. Tension, MOE, EI and Moment Capacity.
4. Vol. VI. EI and Moment Capacity Test Reports and Data for 26, 30 and 36 Series LPI Joists.
5. Vol. VII. Round Web Opening Shear Capacity Test Reports and Data for LPI Joists.
6. Vol. VIII. Rectangular Web Opening Shear Capacity Test Reports and Data for LPI Joists.
7. Vol. IX. Web Opening Test Reports and Data for LPI Joists.
8. Vol. X. Multiple Span Bearing and Minimum End Bearing Test Reports and Data for LPI Joists.
9. LPI Joists with Douglas Fir Flange, Test Calculations and Data, January 1996.
10. Test Data for Mechanical Properties, I-Joist Products, January 1998.
11. Qualification Test Data for LPI 36 Series I-Joist- Maritime Pine LVL Flange.
12. Qualification Test Data for LPI 100, 125, 200, 225, 300 and 325 Series I-Joists (Aspen Flange).
13. Qualification Test Data for LPI 100, 125, 150, 200, 225, 250, 300, 325 and 350 Series I-Joists (Lodgepole Pine Flange).
14. Qualification Test Data for LPI 100, 125, 150, 200, 225, 250, 300, 325, 350 and 550 Series I-Joists (Douglas Fir Flange).

15. Qualification Test Data for LPI 100, 125, 150, 200, 225, 250, 300, 325, 350 and 550 Series I-Joists (Southern Pine Flange).
16. Qualification on LPI 36A and LPI 56A Series I-Joists for Abitibi-LP Engineered Wood, Larouche, Quebec Canada.

Test Reports for TLI wood I-joists are as follows:

1. Report No. WR-93101, titled "Structural Load Tests on TecLam 15, 25 and 35 Prefabricated Wood I-Joists".
2. Table I TLI I-Joists Design Properties and Table II TLI Hole Chart and Table III TLI Plywood Web Stiffness Details were sealed by Joseph Robert Nelson, P.E., State of California, License No. 19894.
3. TLI 16 and TLI 21 Qualification Test Data.

Quality Assurance Manual – The quality assurance manual for LPI and TLI I-Joists is as follows:

1. Quality Assurance Manual, I-Joist Products, 2005.

9.0 CONDITIONS OF USE

The LPI and TLI Series Wood I-Joists described in this report shall comply with this report and are subject to the following conditions:

1. The LPI and TLI wood I-joists shall be designed in accordance with this report. Details provided in Figures 1 through 9 and Tables 1 through 15 of this report shall be confirmed for applicability for each project. Engineering calculations may be required. The following items should be considered when submitting calculations to the building official: lateral support, vertical support, connections (including selection of joist hangers), lateral force resistance, location and size of web holes and applied loads and spans.

2. Structural designs using LPI and TLI I-joists shall conform to the manufacturer's specifications except that appropriate design load(s), deflection limitation(s) and other performance standards of the New York City Building Code shall apply.

3. The I-joists must be installed in accordance with this report and the manufacturer's installation details. Installation details may require supplementary consideration as noted in Section 6.3.

4. The I-joists are manufactured in accordance with the Quality Assurance Manual with third-party inspections by APA-The Engineered Wood Association (7011 S. 19th St., Tacoma, WA 98411) at the Louisiana-Pacific Corporation Engineered Wood Products facilities in Wilmington, North Carolina, Red Bluff, California and Larouche, Quebec, Canada.

10.0 RECOMMENDATIONS

That the LPI I-Joists be accepted on condition that all uses, locations and installations shall comply with the applicable requirements of the New York City Building Code and Technical Policy and Procedure Notices #8, 1992 dated August 19, 1992 & #2/00 dated July 24, 2000 (attached) and on further condition that:

1. Structure designs using wood I-joists shall conform to the manufacturer's specifications except that appropriate design load(s), deflection limitation(s) and other performance standards of the New York City Building Code shall apply.

2. When stored out-of-doors or exposed to wet weather conditions during construction, be inspected by the user for flange-web separation, swelling or warping and be replaced if so damaged.

3. Glue used shall not delaminate during a fire.

4. Wood I-Joists shall be used in locations that will ultimately be protected from the weather and be marked "Exposure I", indicating the exposure durability as defined in PS 2-92, "Performance Standards for Wood-Based Structural Use Panels."

5. The size of any cutouts in the web of the joist shall not exceed the manufacturer's recommendations.

6. The cutting of openings for ducts, pipes, conduits, etc. in wood I-joists shall be subject to a controlled inspection.

7. Firestopping shall be provided between the ceiling and the floor or roof above and shall be divided into approximately equal areas not greater than 500 square feet.

8. The building permit applicant shall notify the Fire Department of the proposed installation of wood I-joists prior to the Building Department issuance of a construction permit. Evidence of such notification shall be a certifying statement submitted on Form TR-1, Technical Report, reading as follows:

   I hereby state that I have mailed a copy of this statement to the Fire Department, Bureau of Fire Prevention, Technology Management Unit, as notification of the proposed installation of wood I-joists at this location.

   This statement shall be placed on the reverse side of the form in the lower right-hand box.

   The copy of the completed Form TR-1 shall be mailed to the address at:

   Chief-In-Charge of the Bureau of Fire Prevention
   Fire Department
   Bureau of Fire Prevention
   Technology Management Unit
   9 MetroTech Center
   Brooklyn, New York 11201-3857

All shipments and deliveries of such material shall be provided with a permanent marking suitably placed, certifying that the material shipped or delivered is equivalent to those tested and accepted for use, as provided for in Section 27-131 of the Building Code.

Final Acceptance _____

Examined by _____

Table 1. Design Values of I-Joists

JOIST SERIES	JOIST DEPTH (in.)	MOMENT (lbs-ft)	EI x 10^6 (lbs-in^2)	K x 10^6 (ft-lbs/in)	SHEAR[3] 3.5" MINIMUM BEARING LENGTH (lbs)	END REACTION 1.75" MINIMUM BEARING LENGTH (lbs)		INTERIOR REACTION 3.5" MINIMUM BEARING LENGTH (lbs.)	
						W/O W.S.	W/ W.S.	W/O W.S.	W/ W.S.
LPI 100	9.5	2615	124	0.448	1125	945	NA	1900	NA
	11.875	3385	216	0.544	1425				
LPI 125	9.5	2755	142	0.448	1125				
	11.875	3565	248	0.544	1425				
LPI 150	9.5	3040	162	0.448	1125				
	11.875	3930	287	0.544	1425				
LPI 200	9.5	2865	142	0.438	1125	1020	NA	2050	2400
	11.875	3840	248	0.549	1425		1150		
	14	4720	371	0.658	1725		1150		
	16	5550	514	0.746	1980		1150		
LPI 225	9.5	3025	162	0.438	1125		NA		
	11.875	4050	287	0.549	1425		1150		
	14	4975	431	0.658	1725		1150		
	16	5850	597	0.746	1980		1150		
LPI 250	9.5	3575	187	0.438	1125		NA		
	11.875	4630	328	0.549	1425		1150		
	14	5570	495	0.658	1725		1150		
	16	6460	691	0.746	1980		1150		
LPI 300	9.5	3795	185	0.423	1225	1200	1225	2350	2700
	11.875	5075	318	0.570	1425		1510		
	14	6235	474	0.671	1725		1510		
	16	7335	652	0.761	1980		1510		
LPI 325	9.5	4340	214	0.423	1225		1225		
	11.875	5620	370	0.570	1425		1510		
	14	6770	550	0.671	1725		1510		
	16	7845	758	0.761	1980		1510		
LPI 350	11.875	5620	417	0.570	1425		1510		
	14	6770	627	0.670	1725		1510		
	16	7845	869	0.761	1980		1510		
LPI 550	11.875	8625	610	0.569	1940	1400	[illegible]	[illegible]	3850
	14	10385	907	0.665	2150		[illegible]	[illegible]	
	16	12040	1220	0.756	2350		[illegible]	[illegible]	

For SI Units: 1 inch = 25.4 mm, 1 plf = 14.6 N/m, 1 ft-lb = 1.36 N-m, 1 lb = 4.45 N, 1 in^2-lb = 0.00287 N-m^2

NOTES:

1. The design values are for normal duration of load and may be adjusted in accordance with the applicable code.
2. The repetitive member use factor shall be limited to 1.0.
3. Shear capacity represents I-joists having web stiffeners, except for depths less than 11-7/8 inches.
4. W/ W.S. is With Web Stiffeners and W/O W.S. is Without Web Stiffeners.
5. The allowable design values shall apply to product installation conditions of use that are dry, well ventilated and [illegible] conditions are product installation conditions where ambient moisture content is 16% or less.
6. When calculating deflection, both bending and shear deformation shall be determined using the following formulas:

Example 1 – Formula for uniform load on a simple span joist:

$$\Delta = \frac{22.5wL^4}{EI} + \frac{wL^2}{K}$$

Example 2 – Formula for concentrated load on a simple span joist:

$$\Delta = \frac{36PL^3}{EI} + \frac{2PL}{K}$$

where:

Δ = deflection (in.).
w = uniform load in pounds per lineal foot (plf).
L = design span (ft).
K = shear deformation coefficient (ft-lbs/in.).
EI = stiffness in lbs-in^2.
P = concentrated load (lbs).

Table 2. Design Values of I-Joists (Cont'd)

JOIST SERIES	JOIST DEPTH (in)	MOMENT (lbs.-ft)	EI x 10^6 (lbs-in^2)	K x 10^6 (ft-lbs./in)	SHEAR[3] 3.5" MINIMUM BEARING LENGTH (lbs.)	END REACTION (MINIMUM BEARING LENGTH) (lbs.)		INTERIOR REACTION 3.5" MINIMUM BEARING LENGTH (lbs.)	
						W/O W.S.	W/ W.S.	W/O W.S.	W/ W.S.
LPI 26	9.250	3150	135	0.353	960	945 (1.75")	945 (1.75")	2200	2600
	9.500	3250	152	0.368	1125				
	11.250	3955	226	0.424	1185				
	11.875	4205	256	0.447	1425				
LPI 26A	9.250	3150	160	0.353	960				
	9.500	3250	165	0.368	1125				
	11.875	4205	286	0.447	1425				
LPI 30	9.500	3825	178	0.357	1125	1020 (1.75")	1020 (1.75")	2200	2800
	11.875	4950	298	0.451	1425	1020 (1.75")	1150 (1.75")		
	14.000	5960	432	0.541	1725	1020 (1.75")	1150 (1.75")		
	16.000	6910	581	0.613	1980	1020 (1.75")	1150 (1.75")		
LPI 30A	9.500	3825	199	0.357	1125	1020 (1.75")	1020 (1.75")		
	11.875	4950	334	0.451	1425	1020 (1.75")	1150 (1.75")		
	14.000	5960	484	0.541	1725	1020 (1.75")	1150 (1.75")		
	16.000	6910	650	0.613	1980	1020 (1.75")	1150 (1.75")		
LPI 36	11.875	6445	384	0.468	1615	1200 (1.75")	1510 (1.75")	2800	3500
	14.000	7755	556	0.550	1830	1200 (1.75")	1510 (1.75")		
	16.000	8995	747	0.625	2020	1200 (1.75")	1510 (1.75")		
	18.000	10135	967	0.700	2185	1200 (2.50")	1799 (2.50")		
	20.000	11270	1215	0.774	2320	1200 (2.50")	1857 (2.50")		
	22.000	12390	1491	0.850	2435	1200 (2.50")	1906 (2.50")		
	24.000	13505	1796	0.922	2525	1200 (2.50")	1945 (2.50")		
LPI 36A	11.875	6445	429	0.468	1615	1200 (1.75")	1510 (1.75")		
	14.000	7755	622	0.550	1830	1200 (1.75")	1510 (1.75")		
	16.000	8995	836	0.625	2020	1200 (1.75")	1510 (1.75")		
	18.000	10135	1082	0.700	2185	1200 (2.50")	1799 (2.50")		
	20.000	11270	1360	0.774	2320	1200 (2.50")	1857 (2.50")		
	22.000	12390	1669	0.850	2435	1200 (2.50")	1906 (2.50")		
	24.000	13505	2010	0.922	2525	1200 (2.50")	1945 (2.50")		
LPI 56A	11.875	10170	668	0.549	1940	1400 (1.75")	1840 (1.75")		4000
	14.000	12250	968	0.641	2241	1400 (1.75")	1840 (1.75")		
	16.000	14205	1301	0.729	2581	1400 (1.75")	1840 (1.75")		
	18.000	16010	1684	0.817	2921	1700 (2.50")	2303 (2.50")		5000
	20.000	17800	2115	0.905	3261	1700 (2.50")	2449 (2.50")		
	22.000	19575	2597	0.993	3601	1700 (2.50")	2595 (2.50")		
	24.000	21340	3127	1.081	3856	1700 (2.50")	2741 (2.50")		

For SI Units: 1 inch = 25.4 mm, 1 plf = 14.6 N/m, 1 ft-lb = 1.36 N-m, 1 lb = 4.45 N, 1 in^2-lb = 0.00287 N-m^2

NOTES:

1. The design values are for normal duration of load and may be adjusted in accordance with the applicable code
2. The repetitive member use factor shall be limited to 1.0.
3. Shear capacity represents I-joists having web stiffeners, except for depths less than 11-7/8 inches.
4. W/ W.S. is with Web Stiffeners and W/O W.S. is Without Web Stiffeners.
5. The allowable design values shall apply to product installation conditions of use that are dry, well ventilated and covered. Dry conditions are product installation conditions where ambient moisture content is 16% or less.
6. When calculating deflection, both bending and shear deformation shall be determined using the following formulas:

Example 1 – Formula for uniform load on a simple span joist:

$$\Delta = \frac{22.5wL^4}{EI} + \frac{wL^2}{K}$$

Example 2 – Formula for concentrated load on a simple span joist:

$$\Delta = \frac{36PL^3}{EI} + \frac{2PL}{K}$$

where:

Δ = deflection (in.).
w = uniform load in pounds per lineal foot (plf).
L = design span (ft).
K = shear deformation coefficient (ft-lbs/in.).
EI = stiffness in lbs-in^2.
P = concentrated load (lbs).

Table 3. Design Values of I-Joists (Cont'd)

JOIST SERIES	JOIST DEPTH (in.)	JOIST WEIGHT (plf)	MOMENT (lbs-ft)	SHEAR (lbs)	END REACTION W/O W.S. (lbs)	INTERIOR REACTION		EI x 10^6 (lbs-in^2)	K x 10^6 (ft-lbs/in)
						W/O W.S. (lbs)	W/W.S. (lbs)		
TLI 15	9.5	1.9	2800	1125	965	2245	2245	177	0.408
	11.875	2.2	3735	1425	965	2245	2245	305	0.506
TLI 25	9.5	2.1	3290	1125	995	2440	2650	204	0.414
	11.875	2.4	4390	1425	995	2440	2650	351	0.512
	14	2.8	5385	1560	995	2440	2650	521	0.602
TLI 35	11.875	2.8	5865	1425	1250	2850	3060	455	0.522
	14	3.0	7200	1560	1250	2850	3060	672	0.612
	16	3.3	8455	1700	1250	2850	3060	919	0.697
TLI CTR	9.5	1.9	2215	1125	965	2245	2245	[illegible]	0.408
	11.875	2.2	2955	1425	965	2245	2245	[illegible]	[illegible]

For SI: 1 inch = 25.4 mm, 1 plf = 14.6 N/m, 1 ft-lb = 1.36 N-m, 1 lb = 4.45 N, 1 in^2-lb = 0.00287 N-m^2.

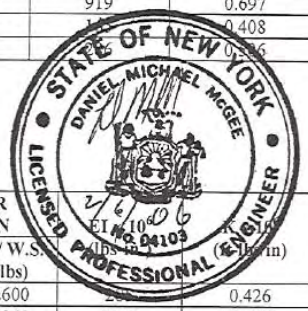


Table 4. Design Values of I-Joists (Cont'd)

JOIST SERIES	JOIST DEPTH (in.)	JOIST WEIGHT (plf)	MOMENT (lbs-ft)	SHEAR (lbs)	MAX. END REACTION		INTERIOR REACTION		EI x 10^6 (lbs-in^2)	K x 10^6 (ft-lbs/in)
					W/O W.S. (lbs)	W/ W.S. (lbs)	W/O W.S. (lbs)	W/ W.S. (lbs)		
TLI 16	9.5	2.25	2220	1225	1040	1225	2600	2600	[illegible]	0.426
	11.5	2.65	2765	1335	1165	1380	2750	2960	309	0.499
	11.875	2.80	2965	1375	1215	1425	2800	3100	352	0.526
	14	3.00	3640	1630	1075	1470	2300	3000	522	0.616
	16	3.30	4275	1630	1075	1470	2300	3000	718	0.702
TLI 21	9.5	2.25	2770	1225	1150	1225	2700	2700	243	0.426
	11.5	2.65	3460	1410	1215	1380	2750	2960	366	0.499
	11.875	2.80	3705	1450	1230	1425	2800	3100	417	0.526
	14	3.00	4550	1710	1270	1550	2875	3100	616	0.616
	16	3.30	5340	1925	1320	1690	2950	3350	845	0.702

For SI: 1 inch = 25.4 mm, 1 plf = 14.6 N/m, 1 ft-lb = 1.36 N-m, 1 lb = 4.45 N, 1 in^2-lb = 0.00287 N-m^2.

NOTES FOR TABLES 3 AND 4:

1. The design values are for normal duration of load and may be adjusted in accordance with the applicable code.
2. Moment capacity in Table 3 may be increased 4% for applications that qualify as repetitive members in accordance with the NDS. Moment capacity in Table 4 may be increased 7% for applications that qualify as repetitive members in accordance with the NDS.
3. Allowable shear is based on a 3.5-inch bearing with web stiffeners on ends.
4. Maximum end reaction is based on a 1.75-inch bearing.
5. Maximum interior reaction is based on a 3.5-inch bearing.
6. W/ W.S. is With Web Stiffeners and W/O W.S. is Without Web Stiffeners.
7. The allowable design values shall apply to product installation conditions of use that are dry, well ventilated and covered. Dry conditions are product installation conditions where ambient moisture content is 16% or less.
8. When calculating deflection, both bending and shear deformation shall be determined using the following formulas:

EXAMPLE 1 – Formula for uniform load on a simple span joist:

$$\Delta = \frac{22.5wL^4}{EI} + \frac{wL^2}{K}$$

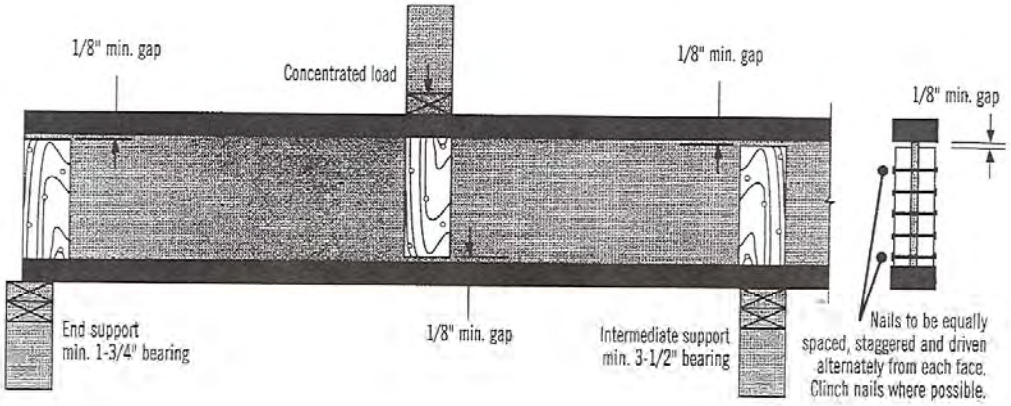
EXAMPLE 2 – Formula for concentrated load on a simple span joist:

$$\Delta = \frac{36PL^3}{EI} + \frac{2PL}{K}$$

where:

Δ = deflection (in.).
P = concentrated load (lbs).
w = uniform load in pounds per lineal foot (plf).
L = design span (ft).
K = shear deformation coefficient (ft-lbs/in.).
EI = stiffness in lbs-in^2.

Figure 1. I-Joist Web Stiffener Requirements



NOTES:
1. Web Stiffeners, when required, must be installed in pairs – one to each side of the web. Web stiffeners are always required for the "Bird's Mouth" roof bearing detail (Figure 9, Detail 6).
2. Web stiffeners should be cut to fit between the flanges of the I-joist, leaving a minimum 1/8" gap (1" maximum). At bearing locations, the stiffeners should be installed tight to the bottom flange with the gap to the top flange. At locations of concentrated loads, the stiffeners should be installed tight to the top flange with the gap to the bottom flange.
3. Web stiffeners should be cut from APA-rated (or equal) OSB or plywood, or from 2x lumber or structural composite lumber.
4. Web stiffeners should be the same width as the bearing surface, with a minimum of 3-1/2".
5. See Table 5 for required nailing, maximum stiffener depth and minimum stiffener thickness.
6. See Tables 1 to 4 for minimum end bearing and interior bearing length.

Table 5. I-Joist Web Stiffener Details

JOIST DEPTH (in.)	MAXIMUM WEB STIFFENER DEPTH (in.)	TOTAL NUMBER OF 8d BOX NAILS (PER FACE)											
		LPI I-Joist Series								TLI I-Joist Series			
		[1]100-150	[2]200-250	[2]300-350	[3,5]550	[1]26/26A	[2]30/30A	[2]36/36A	[3,5]56A	[1]15/CTR	[2]25	[2]35	[4]16/21
9.250	6-1/8	-	-	-	-	3	-	-	-	-	-	-	-
9.500	6-3/8	3	3	3	-	3	3	-	-	3	3	-	3
11.250	8-1/8	-	-	-	-	3	-	-	-	-	-	-	-
11.500	8-3/8	-	-	-	-	-	-	-	-	-	-	-	3
11.875	8-3/4	3	3	3	3	3	3	4	4	3	3	3	3
14.000	10-7/8	-	3	3	3	-	4	5	5	-	3	3	3
16.000	12-7/8	-	3	3	3	-	4	6	6	-	-	3	3
18.000	14-7/8	-	-	-	-	-	-	7	7	-	-	-	-
20.000	16-7/8	-	-	-	-	-	-	8	8	-	-	-	-
22.000	18-7/8	-	-	-	-	-	-	9	9	-	-	-	-
24.000	20-7/8	-	-	-	-	-	-	10	10	-	-	-	-

NOTES:
1. Web stiffeners shall be a minimum of 15/32" thick.
2. Web stiffeners shall be a minimum of 23/32" thick.
3. Web stiffeners shall be a minimum of 1-1/2" thick.
4. Web stiffeners shall be a minimum of 1-1/8" thick.
5. For the LPI 550 and LPI 56A Series I-Joists it is required to use 10d box or common nails.
6. See Figure 1 for I-Joist web stiffener requirements.

Figure 2. Web Hole Drawing for LPI Joists

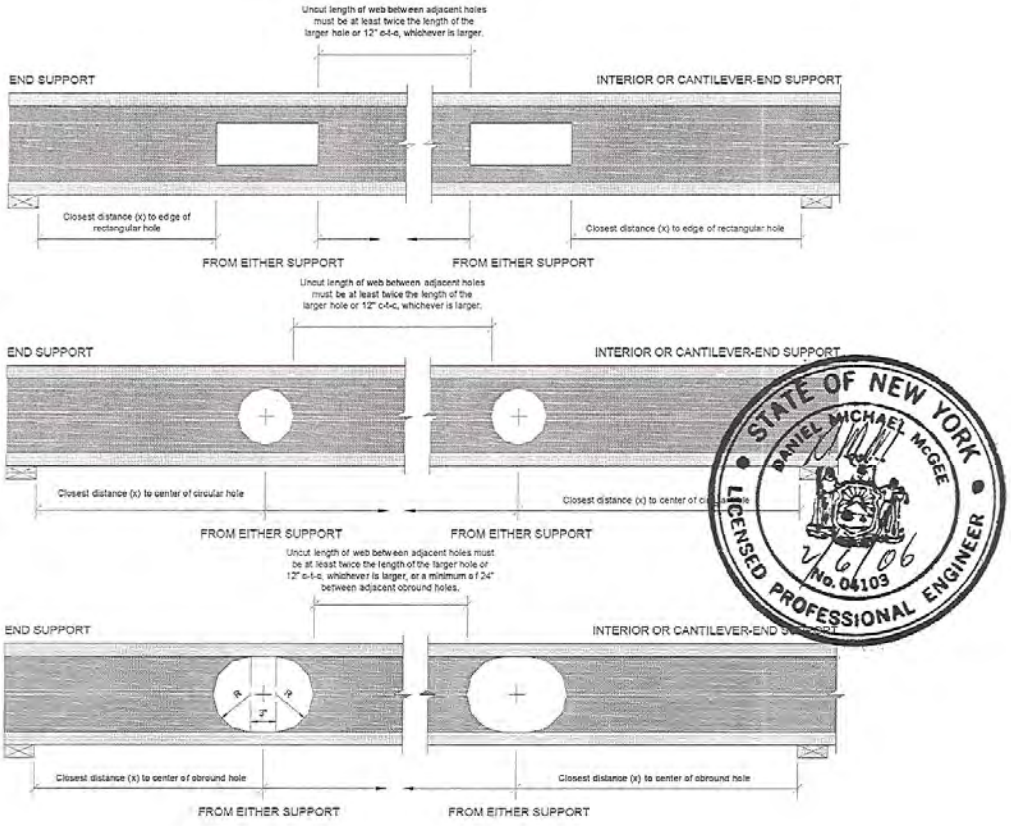


Table 6. Web Hole Equations for LPI Joists

General equation form for allowable circular and rectangular holes shear:

Allowable Web Hole Shear (lbs) = C1* (D - H)/D + C2 * W + C3

Where: D = Joist Depth (in)
H = Hole Height (in)
W = Hole Width (in)

Equation Constants:

Circular Holes

Joist Series	C1	C2	C3	Maximum Depth
100	1050	0	38	-
200	885	0	307	-
300	1378	0	105	-
125	1050	0	38	-
225	885	0	307	-
325	1378	0	105	-
150	1050	0	38	-
250	885	0	307	-
350	1378	0	105	-
550	1378	0	105	-
26	1235	0	45	-
30	1041	0	361	-
36	1621	0	124	16"
56	1621	0	124	16"
36	2489	0	88	24"
56	2489	0	88	24"

Rectangular Holes

LPI Joist Series	LPI Joist Depth	C1	C2	C3
26 30 36 56	9.5	610	-22.4	282
	11.875	610	-22.4	282
	14	1075	-33.8	413
	16	1075	-33.8	413
	18	1731	-52.0	599
	20	1731	-52.0	599
	22	1731	-52.0	599
	24	1731	-52.0	599
0 125 150 0 225 250 325 350 550	9.5	519	-19.0	240
	11.875	519	-19.0	240
	14	914	-28.7	351
	16	914	-28.7	351
	18	1471	-44.2	509
	20	1471	-44.2	509
	22	1471	-44.2	509
	[illegible]	1471	-44.2	509

Allowable Web Hole Shear for Obround Holes:

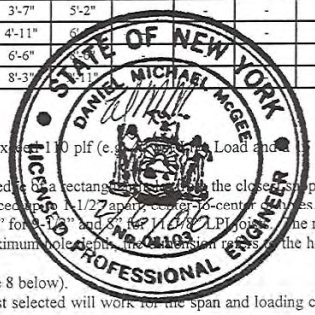
Joist Series	Shear (lbs)	Maximum Depth (in)	Joist Series	Shear (lbs)	Maximum Depth (in)
100	-	-	26	-	
200	360	-	30	360	
300	420	-	36	420	
125	-	-	56	420	16
225	360	-	36	-	24
325	420	-	56	-	24
150	-	-			
250	360	-			
350	420	-			
550	420	-			

NOTES:
1. A drawing of the obround hole can be found on page 8 (bottom drawing).
2. The above Obround hole allowable shears apply to all joist depths in a given series and are based on the maximum size hole.
3. Smaller Obround holes are limited to the same value.
4. For LPI 36 and LPI 56A depths greater than 16", the maximum Obround hole for the 16" depth can be cut using the allowable for that depth.

DESIGN ASSUMPTIONS:
1. The Allowable Web Hole Shear calculated from above is for normal load duration and can be adjusted for other durations.
2. The critical location for web hole shear is at the center of a circular hole, or to either edge of a rectangular or Obround hole.
3. Obround holes are (up to) full web-depth holes with semi-circular ends defined by three overlapping circular holes spaced up to 1-1/2" apart, center-to-center of holes.
4. The maximum hole depth for circular and rectangular holes is Joist Depth less 4", except the maximum hole depth is 6" for 9-1/2" and 8" for 11-7/8" LPI joists. The maximum hole width for rectangular holes is 18". Where the Maximum Hole Dimension for rectangular holes exceeds the maximum hole depth, the dimension refers to hole width and the hole depth is assumed to be the maximum for that joist depth.
5. Holes cannot be located any closer than 1' or 3 times the length of the hole from the inside face of the closest bearing, without further analysis by a design professional.

Table 7. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
9 1/2	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	2'-8"	-	-	-	-	-
		12'	1'-0"	1'-0"	2'-6"	-	-	-	-	-	1'-0"	2'-0"	4'-2"	-	-	-	-	-
		14'	1'-0"	1'-5"	3'-11"	-	-	-	-	-	1'-0"	3'-5"	5'-11"	-	-	-	-	-
		16'	1'-0"	2'-6"	4'-11"	-	-	-	-	-	2'-4"	4'-9"	7'-7"	-	-	-	-	-
		18'	1'-5"	3'-8"	6'-5"	-	-	-	-	-	4'-0"	6'-3"	9'-0"	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	-	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	-	-	-	-	3'-5"	1'-0"	1'-0"	2'-0"	-	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	-	-	-	-	4'-8"	1'-0"	1'-8"	3'-5"	-	-	-	-	6'-8"
		16'	1'-0"	1'-0"	2'-6"	-	-	-	-	5'-8"	1'-1"	2'-9"	4'-9"	-	-	-	-	-
		18'	1'-0"	1'-10"	3'-8"	-	-	-	-	7'-4"	2'-8"	4'-5"	6'-3"	-	-	-	-	-
	LPI 300 325	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-4"	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-6"	1'-0"	1'-0"	2'-4"	-	-	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-10"	-	-	-	-	3'-11"	1'-0"	1'-0"	3'-10"	-	-	-	-	5'-11"
		16'	1'-0"	1'-0"	2'-10"	-	-	-	-	5'-3"	1'-0"	1'-11"	5'-2"	-	-	-	-	7'-7"
		18'	1'-0"	1'-0"	4'-1"	-	-	-	-	6'-5"	1'-0"	3'-6"	6'-9"	-	-	-	-	9'-0"
		20'	1'-0"	2'-1"	5'-1"	-	-	-	-	7'-7"	1'-11"	4'-11"	8'-0"	-	-	-	-	-
11 7/8	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	3'-3"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	3'-1"	-	-	-	-	1'-0"	1'-1"	2'-8"	4'-9"	-	-	-	-
		14'	1'-0"	1'-0"	2'-2"	4'-3"	-	-	-	-	1'-0"	2'-5"	4'-2"	6'-4"	-	-	-	-
		16'	1'-0"	1'-8"	3'-8"	5'-8"	-	-	-	-	1'-11"	3'-11"	5'-7"	8'-0"	-	-	-	-
		18'	1'-0"	2'-9"	4'-7"	6'-10"	-	-	-	-	3'-6"	5'-4"	7'-2"	-	-	-	-	-
		20'	2'-1"	4'-1"	6'-1"	8'-1"	-	-	-	-	4'-11"	7'-0"	9'-0"	-	-	-	-	-
		22'	3'-4"	5'-0"	7'-3"	9'-5"	-	-	-	-	6'-0"	8'-3"	10'-5"	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-4"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-8"	1'-0"	1'-0"	2'-5"	3'-10"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-8"	2'-10"	-	-	-	5'-8"	1'-0"	2'-4"	3'-7"	5'-2"	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-1"	-	-	-	7'-4"	2'-2"	3'-6"	4'-11"	6'-	-	-	-	-
		20'	1'-1"	2'-1"	3'-7"	5'-7"	-	-	-	8'-7"	3'-5"	4'-11"	6'-6"	8'-1	-	-	-	-
		22'	1'-8"	3'-4"	5'-0"	6'-8"	-	-	-	10'-0"	4'-11"	6'-7"	8'-3"	9'-11	-	-	-	-



DESIGN ASSUMPTIONS FOR TABLES 7 TO 8:

1. The hole locations listed above are valid for joists supporting only uniform loads. The total uniform load must not exceed 110 plf (e.g. 40 psf Live Load and 15 psf Dead Load, spaced up to 24" oc). The uniform Dead Load must be at least 10 plf.
2. Hole location is measured from the inside face of bearing to the center of a circular or Obround hole, or to the nearest edge of a rectangular hole, from the closest support.
3. Obround holes are (up to) full web-depth holes with semi-circular ends defined by three overlapping circular holes spaced up to 1-1/2" apart, center-to-center of holes.
4. The maximum hole depth for circular and rectangular holes is Joist Depth less 4", except the maximum hole depth is 6" for 9-1/2" and 9-7/8" LPI joists. The maximum hole width for rectangular holes is 18". Where the Maximum Hole Dimension for rectangular holes exceeds the maximum hole depth, the dimension refers to the hole width and the hole depth is assumed to be the maximum for that joist depth.
5. Holes cannot be located in the span where designated "-", without further analysis by a professional engineer (see Note 8 below).
6. Clear Span has NOT been verified for these joists and is shown for informational purposes only! Verify that the joist selected will work for the span and loading conditions needed before checking hole location.

GENERAL NOTES FOR TABLES 7 TO 8:

1. **CUT HOLES CAREFULLY! DO NOT OVERCUT HOLES! DO NOT CUT JOIST FLANGES!**
2. Circular and rectangular holes may be placed anywhere within the depth of the web. A minimum ¼" clear distance is required between the hole and a flange. Obround holes may be up to full web-depth.
3. Round holes up to 1-1/2" diameter may be placed anywhere in the web.
4. Perforated "knockouts" may be neglected when locating web holes.
5. Holes larger than 1-1/2" are not permitted in cantilevers without special engineering.
6. Multiple holes must have a clear separation along the length of the joist of at least twice the length of the larger adjacent hole, or a minimum of 12" center-to-center, whichever is greater. **Exception**: adjacent Obround holes may be spaced as close as 24" clear distance between holes.
7. Multiple holes may be spaced closer provided they fit within the boundary of an acceptable larger hole. Example: two 3" round holes aligned parallel to the joist length may be spaced 2" apart (clear distance) provided that a 3" high by 8" long rectangle or an 8" diameter round hole are acceptable for the joist depth at that location and completely encompass the holes.
8. Larger holes, greater uniform loads or non-uniform loads, and closer proximity to supports and other holes may be possible with further analysis (See Section 6.1 #3 or web hole shear equations listed in Table 6).
9. Not all series are available in all depths. Check availability with a local LP Engineered Wood Products distributor.
10. For SI Units Conversion: 1 in. = 25.4 mm; 1 ft. = 304.8 mm.

Table 7. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
11 7/8	LPI 300 325 350	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-11"	-	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-11"	1'-0"	1'-0"	2'-0"	4'-2"	-	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	5'-3"	1'-0"	1'-1"	3'-2"	6'-0"	-	-	-	7'-7"
		18'	1'-0"	1'-0"	2'-4"	4'-7"	-	-	-	6'-5"	1'-0"	2'-2"	4'-5"	7'-2"	-	-	-	9'-0"
		20'	1'-0"	1'-1"	3'-7"	6'-1"	-	-	-	7'-7"	1'-5"	3'-11"	6'-0"	9'-0"	-	-	-	-
		22'	1'-0"	2'-3"	4'-6"	7'-3"	-	-	-	8'-11"	2'-8"	4'-11"	7'-8"	10'-5"	-	-	-	-
		24'	1'-3"	3'-1"	5'-6"	8'-6"	-	-	-	10'-4"	4'-2"	6'-7"	9'-0"	12'-0"	-	-	-	-
	LPI 550	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-11"	-	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-11"	1'-0"	1'-0"	2'-0"	4'-2"	-	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	5'-3"	1'-0"	1'-1"	3'-2"	6'-0"	-	-	-	7'-7"
		18'	1'-0"	1'-0"	2'-4"	4'-7"	-	-	-	6'-5"	1'-0"	2'-2"	4'-5"	7'-2"	-	-	-	9'-0"
		20'	1'-0"	1'-1"	3'-7"	6'-1"	-	-	-	7'-7"	1'-5"	3'-11"	6'-0"	9'-0"	-	-	-	-
		22'	1'-0"	2'-3"	4'-6"	7'-3"	-	-	-	8'-11"	2'-8"	4'-11"	7'-8"	10'-5"	-	-	-	-
		24'	1'-3"	3'-1"	5'-6"	8'-6"	-	-	-	10'-4"	4'-2"	6'-7"	9'-0"	12'-0"	-	-	-	-
		26'	2'-0"	4'-7"	7'-3"	9'-10"	-	-	-	11'-10"	5'-10"	7'-9"	11'-0"	-	-	-	-	-
		28'	2'-10"	5'-8"	8'-6"	11'-4"	-	-	-	13'-5"	6'-11"	9'-9"	12'-7"	-	-	-	-	-
14	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	2'-8"	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-8"	1'-0"	1'-0"	1'-8"	2'-9"	4'-2"	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-1"	3'-3"	-	-	5'-8"	1'-0"	1'-11"	3'-2"	4'-4"	5'-7"	-	-	-
		18'	1'-0"	1'-0"	1'-10"	3'-3"	4'-7"	-	-	7'-4"	1'-9"	3'-1"	4'-5"	5'-10"	7'-2"	-	-	-
		20'	1'-0"	2'-1"	3'-1"	4'-7"	6'-1"	-	-	8'-7"	3'-5"	4'-5"	6'-0"	7'-6"	9'-0"	-	-	-
		22'	1'-8"	2'-10"	4'-6"	5'-7"	7'-3"	-	-	10'-0"	4'-4"	6'-0"	7'-1"	8'-9"	10'-5"	-	-	-
		24'	3'-1"	4'-3"	5'-6"	6'-8"	8'-6"	-	-	11'-6"	5'-11"	7'-2"	9'-0"	10'-2"	12'-0"	-	-	-
		26'	4'-0"	5'-3"	6'-7"	8'-6"	9'-10"	-	-	-	7'-9"	9'-1"	10'-5"	12'-4"	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	3'-7"	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	-	-	3'-11"	1'-0"	1'-0"	1'-6"	2'-9"	4'-10"	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-1"	4'-1"	-	-	5'-3"	1'-0"	1'-0"	2'-4"	4'-4"	6'-5"	-	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	3'-3"	5'-6"	-	-	6'-5"	1'-0"	1'-9"	3'-6"	5'-10"	8'-1"	-	-	9'-0"
		20'	1'-0"	1'-0"	2'-1"	4'-7"	6'-7"	-	-	7'-7"	1'-0"	2'-11"	4'-11"	7'-0"	9'-6"	-	-	-
		22'	1'-0"	1'-8"	3'-4"	5'-7"	7'-10"	-	-	8'-11"	2'-8"	4'-4"	6'-7"	8'-9"	-	-	-	-
		24'	1'-0"	2'-5"	4'-10"	6'-8"	9'-1"	-	-	10'-4"	3'-6"	5'-11"	7'-9"	10'-2"	-	-	-	-
		26'	2'-0"	4'-0"	5'-11"	7'-11"	10'-6"	-	-	11'-10"	5'-2"	7'-1"	9'-9"	11'-8"	-	-	-	-
		28'	2'-10"	5'-0"	7'-1"	9'-2"	12'-0"	-	-	13'-5"	6'-3"	9'-1"	11'-2"	13'-4"	-	-	-	-
		30'	3'-10"	6'-1"	8'-4"	10'-7"	13'-7"	-	-	14'-4"	8'-2"	10'-6"	12'-9"	15'-0"	-	-	-	-
16	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-8"	1'-0"	1'-0"	1'-6"	2'-5"	3'-5"	4'-6"	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	-	5'-8"	1'-0"	1'-6"	2'-4"	3'-7"	4'-9"	6'-0"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-9"	3'-8"	5'-0"	-	7'-4"	1'-9"	2'-8"	4'-0"	4'-11"	6'-3"	7'-8"	-	-
		20'	1'-0"	1'-7"	2'-7"	3'-7"	5'-1"	6'-1"	-	8'-7"	2'-11"	3'-11"	5'-5"	6'-6"	8'-0"	9'-6"	-	-
		22'	1'-8"	2'-10"	3'-11"	5'-0"	6'-2"	7'-10"	-	10'-0"	4'-4"	5'-5"	6'-7"	8'-3"	9'-4"	11'-0"	-	-
		24'	2'-5"	3'-8"	4'-10"	6'-1"	7'-3"	9'-1"	-	11'-6"	5'-11"	7'-2"	8'-4"	9'-7"	10'-10"	-	-	-
		26'	4'-0"	4'-7"	5'-11"	7'-3"	8'-6"	10'-6"	-	-	7'-1"	8'-5"	9'-9"	11'-0"	13'-0"	-	-	-
		28'	5'-0"	6'-4"	7'-1"	8'-6"	9'-11"	12'-0"	-	-	9'-1"	9'-9"	11'-2"	12'-7"	-	-	-	-
		30'	6'-1"	7'-7"	8'-4"	9'-10"	11'-4"	12'-10"	-	-	10'-6"	12'-0"	12'-9"	14'-3"	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-10"	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	-	3'-11"	1'-0"	1'-0"	[illegible]	[illegible]	[illegible]	5'-7"	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	4'-11"	-	5'-3"	1'-0"	1'-0"	[illegible]	3'-2"	[illegible]	[illegible]	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	2'-4"	4'-1"	5'-11"	-	6'-5"	1'-0"	1'-3"	[illegible]	[illegible]	[illegible]	[illegible]	-	9'-0"
		20'	1'-0"	1'-0"	1'-7"	3'-1"	5'-1"	7'-7"	-	7'-7"	1'-0"	[illegible]	4'-5"	[illegible]	[illegible]	[illegible]	-	-
		22'	1'-0"	1'-2"	2'-10"	4'-6"	6'-8"	8'-11"	-	8'-11"	2'-1"	[illegible]	[illegible]	7'-8"	9'-11"	-	-	-
		24'	1'-0"	1'-10"	3'-8"	5'-6"	7'-11"	10'-4"	-	10'-4"	3'-6"	[illegible]	7'-2"	[illegible]	[illegible]	-	-	-
		26'	1'-4"	3'-4"	5'-3"	7'-3"	9'-2"	11'-2"	-	11'-10"	5'-2"	[illegible]	8'-5"	[illegible]	[illegible]	-	-	-
		28'	2'-10"	4'-3"	6'-4"	8'-6"	10'-7"	12'-8"	-	13'-5"	6'-3"	[illegible]	10'-6"	[illegible]	[illegible]	-	-	-
		30'	3'-10"	5'-4"	7'-7"	9'-1"	11'-4"	14'-4"	-	14'-4"	7'-5"	[illegible]	[illegible]	[illegible]	[illegible]	-	-	-

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Table 7. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport							Distance from Interior Support or Cantilever-End Support								
			Hole Diameter						Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
9 1/2	LPI 26A	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-11"	-	-	-	-	-
		12'	1'-0"	1'-0"	1'-10"	-	-	-	-	-	1'-0"	1'-0"	3'-3"	-	-	-	-	-
		14'	1'-0"	1'-0"	2'-10"	-	-	-	-	-	1'-0"	2'-0"	4'-10"	-	-	-	-	-
		16'	1'-0"	1'-3"	4'-1"	-	-	-	-	-	1'-1"	3'-7"	6'-5"	-	-	-	-	-
		18'	1'-0"	2'-4"	5'-6"	-	-	-	-	-	2'-2"	4'-11"	8'-1"	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	-	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	-	-	-	-	3'-5"	1'-0"	1'-0"	1'-6"	-	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	-	-	-	-	4'-8"	1'-0"	1'-0"	2'-5"	-	-	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-8"	-	-	-	-	5'-8"	1'-0"	1'-6"	3'-7"	-	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	-	-	-	-	7'-4"	1'-0"	2'-8"	5'-4"	-	-	-	-	-
11 7/8	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-5"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	-	1'-0"	1'-0"	1'-9"	3'-10"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	3'-7"	-	-	-	-	1'-0"	1'-0"	3'-1"	5'-7"	-	-	-	-
		16'	1'-0"	1'-0"	2'-6"	4'-11"	-	-	-	-	1'-0"	2'-4"	4'-9"	7'-2"	-	-	-	-
		18'	1'-0"	1'-5"	3'-8"	5'-11"	-	-	-	-	1'-9"	4'-0"	6'-3"	8'-7"	-	-	-	-
		20'	1'-0"	2'-7"	4'-7"	7'-7"	-	-	-	-	2'-11"	5'-5"	7'-6"	-	-	-	-	-
		22'	1'-8"	3'-11"	6'-2"	8'-11"	-	-	-	-	4'-4"	6'-7"	9'-4"	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-8"	1'-0"	1'-0"	1'-6"	2'-9"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-1"	-	-	-	5'-8"	1'-0"	1'-0"	2'-4"	3'-11"	-	-	-	-
		18'	1'-0"	1'-0"	1'-6"	3'-3"	-	-	-	7'-4"	1'-0"	2'-2"	3'-6"	5'-10"	-	-	-	-
		20'	1'-0"	1'-0"	2'-7"	4'-1"	-	-	-	8'-7"	1'-5"	3'-5"	4'-11"	7'-0"	-	-	-	-
		22'	1'-0"	1'-8"	3'-4"	5'-7"	-	-	-	10'-0"	3'-3"	4'-11"	6'-7"	8'-9"	-	-	-	-
	LPI 36A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-11"	1'-0"	1'-0"	1'-6"	3'-1"	-	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-6"	-	-	-	5'-3"	1'-0"	1'-0"	1'-11"	4'-9"	-	-	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	6'-5"	1'-0"	1'-0"	3'-1"	6'-3"	-	-	-	9'-0"
		20'	1'-0"	1'-0"	2'-1"	5'-1"	-	-	-	7'-7"	1'-0"	1'-11"	4'-5"	7'-6"	-	-	-	-
		22'	1'-0"	1'-0"	2'-10"	6'-2"	-	-	-	8'-11"	1'-0"	3'-3"	6'-0"	9'-4"	-	-	-	-
		24'	1'-0"	1'-3"	4'-3"	7'-3"	-	-	-	10'-4"	1'-9"	4'-9"	7'-9"	10'-10"	-	-	-	-
	LPI 56A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-11"	1'-0"	1'-0"	1'-6"	3'-1"	-	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-6"	-	-	-	5'-3"	1'-0"	1'-0"	1'-11"	4'-9"	-	-	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	6'-5"	1'-0"	1'-0"	3'-1"	6'-3"	-	-	-	9'-0"
		20'	1'-0"	1'-0"	2'-1"	5'-1"	-	-	-	7'-7"	1'-0"	1'-11"	4'-5"	7'-6"	-	-	-	-
		22'	1'-0"	1'-0"	2'-10"	6'-2"	-	-	-	8'-11"	1'-0"	3'-3"	6'-0"	9'-4"	-	-	-	-
		24'	1'-0"	1'-3"	4'-3"	7'-3"	-	-	-	10'-4"	1'-9"	4'-9"	7'-9"	10'-10"	-	-	-	-
		26'	1'-0"	2'-8"	5'-3"	8'-6"	-	-	-	11'-10"	3'-2"	5'-10"	9'-1"	12'-4"	-	-	-	-
		28'	1'-0"	3'-7"	6'-4"	9'-11"	-	-	-	13'-5"	4'-10"	7'-8"	10'-6"	14'-0"	-	-	-	-
14	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-8"	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	5'-8"	1'-0"	1'-0"	1'-6"	3'-2"	4'-9"	-	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	-	-	7'-4"	1'-0"	1'-9"	3'-1"	4'-5"	6'-3"	-	-	-
		20'	1'-0"	1'-0"	1'-7"	3'-1"	4'-7"	-	-	8'-7"	1'-5"	2'-11"	4'-5"	6'-0"	7'-6"	-	-	-
		22'	1'-0"	1'-2"	2'-10"	4'-6"	6'-2"	-	-	10'-0"	2'-8"	4'-4"	6'-0"	7'-8"	9'-4"	-	-	-
		24'	1'-3"	2'-5"	3'-8"	5'-6"	7'-3"	-	-	11'-6"	4'-2"	5'-4"	7'-2"	9'-0"	10'-10"	-	-	-
		26'	2'-0"	3'-4"	5'-3"	6'-7"	8'-6"	-	-	-	5'-10"	7'-1"	8'-5"	10'-5"	12'-4"	-	-	-
		28'	2'-10"	5'-0"	6'-4"	7'-9"	9'-11"	-	-	-	6'-11"	8'-4"	10'-6"	11'-11"	14'-0"	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-11"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	-	-	5'-3"	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	-	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	2'-0"	4'-7"	-	-	6'-5"	1'-0"	1'-0"	1'-6"	2'-0"	4'-5"	-	-	9'-0"
		20'	1'-0"	1'-0"	1'-6"	3'-1"	5'-7"	-	-	7'-7"	1'-0"	1'-0"	1'-6"	3'-5"	6'-3"	-	-	-
		22'	1'-0"	1'-0"	1'-8"	4'-6"	6'-8"	-	-	8'-11"	1'-0"	2'-8"	4'-11"	7'-2"	9'-0"	-	-	-
		24'	1'-0"	1'-0"	3'-1"	5'-6"	7'-11"	-	-	10'-4"	1'-9"	3'-6"	5'-11"	8'-6"	10'-8"	-	-	-
		26'	1'-0"	2'-0"	4'-0"	6'-7"	9'-2"	-	-	11'-10"	3'-2"	5'-2"	7'-9"	10'-4"	12'-11"	-	-	-
		28'	1'-0"	2'-10"	5'-0"	7'-9"	10'-7"	-	-	13'-5"	4'-2"	6'-11"	9'-4"	12'-6"	15'-7"	-	-	-
		30'	1'-7"	3'-10"	6'-1"	9'-1"	12'-1"	-	-	14'-4"	5'-11"	8'-2"	11'-0"	14'-8"	18'-4"	-	-	-

Table 7. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround	Hole Diameter							Obround
			2"	4"	6"	8"	10"	12"	14"	Hole	2"	4"	6"	8"	10"	12"	14"	Hole
16	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-8"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	5'-8"	1'-0"	1'-0"	1'-6"	2'-4"	3'-7"	5'-2"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	4'-1"	-	7'-4"	1'-0"	1'-3"	2'-2"	3'-6"	4'-11"	6'-9"	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-7"	3'-7"	5'-1"	-	8'-7"	1'-5"	2'-5"	3'-11"	4'-11"	6'-6"	8'-0"	-	-
		22'	1'-0"	1'-2"	2'-3"	3'-4"	5'-0"	6'-8"	-	10'-0"	2'-8"	3'-9"	5'-5"	6'-7"	8'-3"	9'-11"	-	-
		24'	1'-0"	1'-10"	3'-1"	4'-10"	6'-1"	7'-11"	-	11'-6"	4'-2"	5'-4"	6'-7"	8'-4"	9'-7"	11'-5"	-	-
		26'	2'-0"	3'-4"	4'-7"	5'-11"	7'-3"	9'-2"	-	-	5'-2"	6'-5"	8'-5"	9'-9"	11'-0"	13'-0"	-	-
		28'	2'-10"	4'-3"	5'-8"	7'-1"	8'-6"	10'-7"	-	-	6'-11"	8'-4"	9'-9"	11'-2"	12'-7"	-	-	-
		30'	3'-10"	5'-4"	6'-10"	8'-4"	9'-10"	11'-4"	-	-	8'-2"	9'-9"	11'-3"	12'-9"	14'-3"	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-4"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-4"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-8"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-2"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-11"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	-	5'-11"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	-	5'-3"	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	6'-0"	-	7'-7"
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	5'-0"	-	6'-5"	1'-0"	1'-0"	1'-6"	3'-1"	5'-4"	7'-8"	-	9'-0"
		20'	1'-0"	1'-0"	1'-6"	2'-1"	4'-1"	6'-1"	-	7'-7"	1'-0"	1'-0"	2'-5"	4'-5"	7'-0"	9'-6"	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-10"	5'-0"	7'-10"	-	8'-11"	1'-0"	2'-1"	3'-9"	6'-0"	8'-3"	11'-0"	-	-
		24'	1'-0"	1'-0"	1'-10"	4'-3"	6'-8"	9'-1"	-	10'-4"	1'-1"	3'-6"	5'-4"	7'-9"	9'-7"	-	-	-
		26'	1'-0"	1'-4"	3'-4"	5'-3"	7'-11"	10'-6"	-	11'-10"	2'-6"	4'-6"	6'-5"	9'-1"	11'-8"	-	-	-
		28'	1'-0"	2'-2"	4'-3"	6'-4"	9'-2"	12'-0"	-	13'-5"	4'-2"	6'-3"	8'-4"	10'-6"	13'-4"	-	-	-
		30'	1'-7"	3'-1"	5'-4"	7'-7"	10'-7"	12'-10"	-	14'-4"	5'-2"	7'-5"	9'-9"	12'-0"	15'-0"	-	-	-
18	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-9"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	6'-3"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-1"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	5'-0"	8'-0"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-4"	6'-2"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	6'-0"	9'-4"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-3"	7'-4"	-	1'-0"	1'-0"	1'-6"	2'-4"	4'-9"	7'-9"	10'-10"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-8"	5'-3"	8'-7"	-	1'-0"	1'-0"	1'-6"	3'-2"	6'-5"	9'-1"	13'-0"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	3'-7"	6'-5"	9'-11"	-	1'-0"	1'-0"	2'-0"	4'-10"	7'-8"	10'-6"	-	-
		30'	1'-0"	1'-0"	1'-6"	2'-4"	4'-7"	7'-7"	11'-4"	-	1'-0"	1'-0"	3'-8"	5'-11"	9'-0"	12'-0"	-	-
		32'	1'-0"	1'-0"	1'-6"	3'-3"	5'-8"	8'-11"	12'-11"	-	1'-0"	2'-4"	4'-9"	7'-2"	10'-5"	13'-7"	-	-
		34'	1'-0"	1'-0"	1'-9"	4'-4"	6'-11"	10'-4"	14'-7"	-	1'-0"	3'-4"	5'-11"	9'-4"	11'-11"	15'-4"	-	-
20	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-0"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-6"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-11"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-4"	7'-2"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	6'-0"	8'-5"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-0"	6'-7"	-	1'-0"	1'-0"	1'-6"	2'-6"	4'-6"	7'-1"	10'-5"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	5'-0"	7'-10"	-	1'-0"	1'-0"	1'-6"	3'-5"	6'-3"	9'-1"	11'-11"	-
		30'	1'-0"	1'-0"	1'-6"	2'-0"	3'-10"	6'-1"	9'-1"	-	1'-0"	1'-0"	2'-11"	5'-2"	7'-5"	10'-6"	13'-6"	-
		32'	1'-0"	1'-0"	1'-6"	2'-5"	4'-10"	7'-3"	10'-6"	-	1'-0"	1'-6"	3'-11"	6'-4"	8'-9"	12'-0"	15'-3"	-
		34'	1'-0"	1'-0"	1'-6"	3'-6"	6'-0"	8'-7"	11'-2"	-	1'-0"	2'-6"	5'-0"	7'-7"	10'-2"	13'-7"	17'-0"	-
22	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-11"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	5'-5"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-9"	6'-7"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-10"	5'-10"	8'-5"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	5'-8"	-	1'-0"	1'-0"	1'-6"	2'-9"	4'-10"	7'-8"	9'-9"	-
		30'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-7"	6'-10"	-	1'-0"	1'-0"	2'-2"	4'-5"	6'-8"	9'-0"	11'-3"	-
		32'	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	5'-8"	8'-1"	-	1'-0"	1'-6"	3'-1"	5'-6"	8'-0"	10'-5"	12'-10"	-
		34'	1'-0"	1'-0"	1'-6"	2'-7"	4'-4"	6'-11"	9'-5"	-	1'-0"	2'-6"	5'-0"	6'-9"	9'-4"	11'-11"	14'-5"	-
		36'	1'-0"	1'-0"	1'-6"	3'-8"	5'-6"	8'-2"	10'-11"	-	1'-8"	3'-6"	6'-3"	8'-1"	10'-9"	13'-6"	16'-3"	-
		38'	1'-0"	1'-0"	1'-11"	4'-10"	6'-9"	9'-7"	12'-6"	-	2'-9"	4'-8"	7'-7"	9'-5"	12'-4"	15'-2"	18'-1"	-
24	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-9"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-6"	5'-4"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	7'-1"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-3"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-2"	6'-3"	8'-4"	-
		30'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-10"	5'-4"	-	1'-0"	1'-0"	[illegible]	[illegible]	5'-2"	7'-5"	9'-9"	-
		32'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-10"	6'-6"	-	1'-0"	[illegible]	3'-1"	[illegible]	[illegible]	8'-9"	11'-2"	-
		34'	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	6'-0"	7'-9"	-	1'-0"	[illegible]	[illegible]	[illegible]	[illegible]	10'-2"	12'-9"	-
		36'	1'-0"	1'-0"	1'-6"	2'-9"	4'-7"	7'-3"	9'-1"	-	1'-8"	[illegible]	[illegible]	[illegible]	[illegible]	11'-8"	14'-5"	-
		38'	1'-0"	1'-0"	1'-11"	3'-10"	5'-9"	7'-8"	10'-7"	-	[illegible]	[illegible]	[illegible]	8'-6"	[illegible]	13'-3"	16'-2"	-

Table 8. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
9 1/2	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	2'-7"	3'-0"	3'-5"	3'-10"	-	-	-
		10'	1'-0"	1'-1"	2'-7"	3'-1"	3'-7"	4'-1"	4'-7"	-	-	1'-0"	2'-5"	4'-0"	4'-6"	5'-0"	-	-	-	-
		12'	1'-0"	2'-2"	3'-8"	4'-4"	4'-11"	5'-6"	-	-	-	2'-4"	3'-10"	5'-8"	6'-0"	-	-	-	-	-
		14'	1'-10"	3'-3"	5'-0"	5'-8"	6'-1"	6'-9"	-	-	-	3'-10"	5'-3"	-	-	-	-	-	-	-
		16'	2'-10"	4'-6"	6'-6"	6'-11"	7'-9"	-	-	-	-	5'-2"	6'-9"	-	-	-	-	-	-	-
		18'	4'-1"	5'-11"	7'-9"	8'-2"	-	-	-	-	-	6'-9"	8'-7"	-	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	2'-7"	3'-0"	3'-5"	3'-10"	-	-	-
		10'	1'-0"	1'-1"	2'-7"	3'-1"	3'-7"	4'-1"	4'-7"	-	-	1'-0"	2'-5"	4'-0"	4'-6"	5'-0"	-	-	-	-
		12'	1'-0"	2'-2"	3'-8"	4'-4"	4'-11"	5'-6"	-	-	-	2'-4"	3'-10"	5'-8"	6'-0"	-	-	-	-	-
		14'	1'-10"	3'-3"	5'-0"	5'-8"	6'-1"	6'-9"	-	-	-	3'-10"	5'-3"	-	-	-	-	-	-	-
		16'	2'-10"	4'-6"	6'-6"	6'-11"	7'-9"	-	-	-	-	5'-2"	6'-9"	-	-	-	-	-	-	-
		18'	4'-1"	5'-11"	7'-9"	8'-2"	-	-	-	-	-	6'-9"	8'-7"	-	-	-	-	-	-	-
	LPI 300 325	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	2'-7"	3'-0"	3'-5"	3'-10"	-	-	-
		10'	1'-0"	1'-1"	2'-7"	3'-1"	3'-7"	4'-1"	4'-7"	-	-	1'-0"	2'-5"	4'-0"	4'-6"	5'-0"	-	-	-	-
		12'	1'-0"	2'-2"	3'-8"	4'-4"	4'-11"	5'-6"	-	-	-	2'-4"	3'-10"	5'-8"	6'-0"	-	-	-	-	-
		14'	1'-10"	3'-3"	5'-0"	5'-8"	6'-1"	6'-9"	-	-	-	3'-10"	5'-3"	-	-	-	-	-	-	-
		16'	2'-10"	4'-6"	6'-6"	6'-11"	7'-9"	-	-	-	-	5'-2"	6'-9"	-	-	-	-	-	-	-
		18'	4'-1"	5'-11"	7'-9"	8'-2"	-	-	-	-	-	6'-9"	8'-7"	-	-	-	-	-	-	-
		20'	5'-1"	7'-1"	9'-1"	9'-7"	-	-	-	-	-	8'-0"	10'-0"	-	-	-	-	-	-	-
11 7/8	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-5"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-6"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	9'-5"	-	-	-	-	-	-	9'-4"	11'-0"	-	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-5"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-6"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	9'-5"	-	-	-	-	-	-	9'-4"	11'-0"	-	-	-	-	-	-	-
	LPI 300 325 350	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-5"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-6"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	9'-5"	-	-	-	-	-	-	9'-4"	11'-0"	-	-	-	-	-	-	-
		24'	7'-11"	9'-1"	10'-11"	-	-	-	-	-	-	11'-5"	-	-	-	-	-	-	-	-
	LPI 550	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-5"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-6"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	9'-5"	-	-	-	-	-	-	9'-4"	11'-0"	-	-	-	-	-	-	-
		24'	7'-11"	9'-1"	10'-11"	-	-	-	-	-	-	11'-5"	-	-	-	-	-	-	-	-
		26'	9'-2"	10'-6"	12'-6"	-	-	-	-	-	-	13'-0"	-	-	-	-	-	-	-	-
		28'	9'-11"	12'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 8. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
14	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	4'-9"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	4'-7"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	3'-3"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	5'-0"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	2'-9"	4'-10"	7'-0"	-	-	-	-
		16'	1'-0"	1'-0"	2'-1"	4'-1"	6'-6"	7'-4"	-	-	-	1'-0"	2'-4"	3'-11"	6'-5"	-	-	-	-	-
		18'	1'-0"	1'-5"	3'-3"	5'-0"	7'-9"	8'-8"	-	-	-	1'-9"	3'-6"	5'-10"	8'-1"	-	-	-	-	-
		20'	1'-0"	2'-7"	4'-1"	6'-7"	9'-1"	-	-	-	-	2'-11"	4'-11"	7'-0"	9'-6"	-	-	-	-	-
		22'	1'-8"	3'-4"	5'-7"	7'-10"	10'-7"	-	-	-	-	4'-4"	6'-7"	8'-9"	11'-0"	-	-	-	-	-
		24'	2'-5"	4'-10"	6'-8"	9'-1"	-	-	-	-	-	5'-11"	7'-9"	10'-2"	-	-	-	-	-	-
		26'	4'-0"	5'-11"	7'-11"	10'-6"	-	-	-	-	-	7'-1"	9'-9"	11'-8"	-	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	4'-9"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	4'-7"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	3'-3"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	5'-0"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	2'-9"	4'-10"	7'-0"	-	-	-	-
		16'	1'-0"	1'-0"	2'-1"	4'-1"	6'-6"	7'-4"	-	-	-	1'-0"	2'-4"	3'-11"	6'-5"	-	-	-	-	-
		18'	1'-0"	1'-5"	3'-3"	5'-0"	7'-9"	8'-8"	-	-	-	1'-9"	3'-6"	5'-10"	8'-1"	-	-	-	-	-
		20'	1'-0"	2'-7"	4'-1"	6'-7"	9'-1"	-	-	-	-	2'-11"	4'-11"	7'-0"	9'-6"	-	-	-	-	-
		22'	1'-8"	3'-4"	5'-7"	7'-10"	10'-7"	-	-	-	-	4'-4"	6'-7"	8'-9"	11'-0"	-	-	-	-	-
		24'	2'-5"	4'-10"	6'-8"	9'-1"	-	-	-	-	-	5'-11"	7'-9"	10'-2"	-	-	-	-	-	-
		26'	4'-0"	5'-11"	7'-11"	10'-6"	-	-	-	-	-	7'-1"	9'-9"	11'-8"	-	-	-	-	-	-
		28'	5'-0"	7'-1"	9'-2"	12'-0"	-	-	-	-	-	9'-1"	11'-2"	13'-4"	-	-	-	-	-	-
		30'	6'-1"	8'-4"	10'-7"	13'-7"	-	-	-	-	-	10'-6"	12'-9"	15'-0"	-	-	-	-	-	-
16	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	4'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	5'-0"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	4'-11"	5'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-6"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-2"	3'-11"	6'-5"	-	-	-	1'-0"	1'-0"	2'-5"	4'-2"	5'-11"	-	-	-	-
		16'	1'-0"	1'-0"	1'-8"	3'-3"	5'-3"	7'-9"	-	-	-	1'-0"	1'-11"	3'-7"	5'-7"	7'-7"	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-7"	6'-5"	-	-	-	-	1'-9"	3'-1"	4'-11"	7'-2"	-	-	-	-	-
		20'	1'-0"	2'-1"	3'-7"	5'-7"	8'-1"	-	-	-	-	2'-11"	4'-5"	6'-6"	8'-6"	-	-	-	-	-
		22'	1'-2"	3'-4"	5'-0"	7'-3"	9'-5"	-	-	-	-	4'-4"	6'-0"	8'-3"	10'-5"	-	-	-	-	-
		24'	2'-5"	4'-3"	6'-1"	8'-6"	10'-11"	-	-	-	-	5'-11"	7'-9"	9'-7"	12'-0"	-	-	-	-	-
		26'	3'-4"	5'-3"	7'-3"	9'-10"	11'-10"	-	-	-	-	7'-1"	9'-1"	11'-0"	-	-	-	-	-	-
		28'	5'-0"	6'-4"	8'-6"	11'-4"	13'-5"	-	-	-	-	8'-4"	10'-6"	12'-7"	-	-	-	-	-	-
		30'	6'-1"	7'-7"	9'-10"	12'-1"	-	-	-	-	-	10'-6"	12'-0"	14'-3"	-	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	4'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	5'-0"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	4'-11"	5'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-6"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-2"	3'-11"	6'-5"	-	-	-	1'-0"	1'-0"	2'-5"	4'-2"	5'-11"	-	-	-	-
		16'	1'-0"	1'-0"	1'-8"	3'-3"	5'-3"	7'-9"	-	-	-	1'-0"	1'-11"	3'-7"	5'-7"	7'-7"	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-7"	6'-5"	-	-	-	-	1'-9"	3'-1"	4'-11"	7'-2"	-	-	-	-	-
		20'	1'-0"	2'-1"	3'-7"	5'-7"	8'-1"	-	-	-	-	2'-11"	4'-5"	6'-6"	8'-6"	-	-	-	-	-
		22'	1'-2"	3'-4"	5'-0"	7'-3"	9'-5"	-	-	-	-	4'-4"	6'-0"	8'-3"	10'-5"	-	-	-	-	-
		24'	2'-5"	4'-3"	6'-1"	8'-6"	10'-11"	-	-	-	-	5'-11"	7'-9"	9'-7"	12'-0"	-	-	-	-	-
		26'	3'-4"	5'-3"	7'-3"	9'-10"	11'-10"	-	-	-	-	7'-1"	9'-1"	11'-0"	-	-	-	-	-	-
		28'	5'-0"	6'-4"	8'-6"	11'-4"	13'-5"	-	-	-	-	8'-4"	10'-6"	12'-7"	-	-	-	-	-	-
		30'	6'-1"	7'-7"	9'-10"	12'-1"	-	-	-	-	-	10'-6"	12'-0"	14'-3"	-	-	-	-	-	-
9 1/2	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-11"	2'-4"	2'-9"	3'-5"	4'-0"	-	-
		10'	1'-0"	1'-0"	1'-10"	2'-4"	3'-1"	3'-7"	4'-1"	4'-10"	-	1'-0"	1'-5"	3'-3"	4'-0"	4'-6"	5'-0"	-	-	-
		12'	1'-0"	1'-3"	3'-1"	3'-8"	4'-4"	4'-11"	5'-6"	-	-	1'-1"	2'-11"	4'-9"	5'-5"	6'-0"	-	-	-	-
		14'	1'-0"	2'-6"	4'-3"	5'-0"	5'-8"	6'-5"	-	-	-	2'-5"	4'-6"	6'-8"	7'-0"	-	-	-	-	-
		16'	1'-8"	3'-8"	5'-8"	6'-6"	6'-11"	7'-9"	-	-	-	3'-11"	6'-0"	8'-0"	-	-	-	-	-	-
		18'	2'-9"	5'-0"	6'-10"	7'-9"	8'-2"	-	-	-	-	5'-4"	7'-8"	-	-	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-11"	2'-4"	2'-9"	3'-5"	4'-0"	-	-
		10'	1'-0"	1'-0"	1'-10"	2'-4"	3'-1"	3'-7"	4'-1"	4'-10"	-	1'-0"	1'-5"	3'-3"	4'-0"	4'-6"	5'-0"	-	-	-
		12'	1'-0"	1'-3"	3'-1"	3'-8"	4'-4"	4'-11"	5'-6"	-	-	1'-1"	2'-11"	4'-9"	5'-5"	6'-0"	-	-	-	-
		14'	1'-0"	2'-6"	4'-3"	5'-0"	5'-8"	6'-5"	-	-	-	2'-5"	4'-6"	6'-8"	7'-0"	-	-	-	-	-
		16'	1'-8"	3'-8"	5'-8"	6'-6"	6'-11"	7'-9"	-	-	-	3'-11"	6'-0"	8'-0"	-	-	-	-	-	-
		18'	2'-9"	5'-0"	6'-10"	7'-9"	8'-2"	-	-	-	-	5'-4"	7'-8"	-	-	-	-	-	-	-

Table 8. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
11 7/8	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-7"	3'-2"	3'-10"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-10"	3'-4"	3'-10"	4'-7"	-	-	1'-0"	1'-0"	2'-5"	4'-3"	4'-9"	-	-	-	-
		12'	1'-0"	1'-0"	2'-2"	4'-0"	4'-7"	5'-2"	5'-10"	-	-	1'-0"	2'-4"	3'-10"	5'-8"	-	-	-	-	-
		14'	1'-0"	1'-10"	3'-7"	5'-4"	6'-1"	6'-9"	-	-	-	2'-5"	3'-10"	5'-7"	-	-	-	-	-	-
		16'	1'-8"	2'-10"	4'-11"	6'-6"	7'-4"	-	-	-	-	3'-7"	5'-2"	7'-2"	-	-	-	-	-	-
		18'	2'-9"	4'-1"	5'-11"	8'-2"	8'-8"	-	-	-	-	5'-4"	6'-9"	8'-7"	-	-	-	-	-	-
		20'	3'-7"	5'-7"	7'-7"	9'-7"	-	-	-	-	-	6'-6"	8'-6"	-	-	-	-	-	-	-
		22'	5'-0"	6'-8"	8'-11"	-	-	-	-	-	-	8'-3"	9'-11"	-	-	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-7"	3'-2"	3'-10"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-10"	3'-4"	3'-10"	4'-7"	-	-	1'-0"	1'-0"	2'-5"	4'-3"	4'-9"	-	-	-	-
		12'	1'-0"	1'-0"	2'-2"	4'-0"	4'-7"	5'-2"	5'-10"	-	-	1'-0"	2'-4"	3'-10"	5'-8"	-	-	-	-	-
		14'	1'-0"	1'-10"	3'-7"	5'-4"	6'-1"	6'-9"	-	-	-	2'-5"	3'-10"	5'-7"	-	-	-	-	-	-
		16'	1'-8"	2'-10"	4'-11"	6'-6"	7'-4"	-	-	-	-	3'-7"	5'-2"	7'-2"	-	-	-	-	-	-
		18'	2'-9"	4'-1"	5'-11"	8'-2"	8'-8"	-	-	-	-	5'-4"	6'-9"	8'-7"	-	-	-	-	-	-
		20'	3'-7"	5'-7"	7'-7"	9'-7"	-	-	-	-	-	6'-6"	8'-6"	-	-	-	-	-	-	-
		22'	5'-0"	6'-8"	8'-11"	-	-	-	-	-	-	8'-3"	9'-11"	-	-	-	-	-	-	-
	LPI 36A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-7"	3'-2"	3'-10"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-10"	3'-4"	3'-10"	4'-7"	-	-	1'-0"	1'-0"	2'-5"	4'-3"	4'-9"	-	-	-	-
		12'	1'-0"	1'-0"	2'-2"	4'-0"	4'-7"	5'-2"	5'-10"	-	-	1'-0"	2'-4"	3'-10"	5'-8"	-	-	-	-	-
		14'	1'-0"	1'-10"	3'-7"	5'-4"	6'-1"	6'-9"	-	-	-	2'-5"	3'-10"	5'-7"	-	-	-	-	-	-
		16'	1'-8"	2'-10"	4'-11"	6'-6"	7'-4"	-	-	-	-	3'-7"	5'-2"	7'-2"	-	-	-	-	-	-
		18'	2'-9"	4'-1"	5'-11"	8'-2"	8'-8"	-	-	-	-	5'-4"	6'-9"	8'-7"	-	-	-	-	-	-
		20'	3'-7"	5'-7"	7'-7"	9'-7"	-	-	-	-	-	6'-6"	8'-6"	-	-	-	-	-	-	-
		22'	5'-0"	6'-8"	8'-11"	-	-	-	-	-	-	8'-3"	9'-11"	-	-	-	-	-	-	-
		24'	6'-1"	7'-11"	10'-4"	-	-	-	-	-	-	9'-7"	11'-5"	-	-	-	-	-	-	-
	LPI 56A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-7"	3'-2"	3'-10"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-10"	3'-4"	3'-10"	4'-7"	-	-	1'-0"	1'-0"	2'-5"	4'-3"	4'-9"	-	-	-	-
		12'	1'-0"	1'-0"	2'-2"	4'-0"	4'-7"	5'-2"	5'-10"	-	-	1'-0"	2'-4"	3'-10"	5'-8"	-	-	-	-	-
		14'	1'-0"	1'-10"	3'-7"	5'-4"	6'-1"	6'-9"	-	-	-	2'-5"	3'-10"	5'-7"	-	-	-	-	-	-
		16'	1'-8"	2'-10"	4'-11"	6'-6"	7'-4"	-	-	-	-	3'-7"	5'-2"	7'-2"	-	-	-	-	-	-
		18'	2'-9"	4'-1"	5'-11"	8'-2"	8'-8"	-	-	-	-	5'-4"	6'-9"	8'-7"	-	-	-	-	-	-
		20'	3'-7"	5'-7"	7'-7"	9'-7"	-	-	-	-	-	6'-6"	8'-6"	-	-	-	-	-	-	-
		22'	5'-0"	6'-8"	8'-11"	-	-	-	-	-	-	8'-3"	9'-11"	-	-	-	-	-	-	-
		24'	6'-1"	7'-11"	10'-4"	-	-	-	-	-	-	9'-7"	11'-5"	-	-	-	-	-	-	-
		26'	7'-3"	9'-2"	11'-2"	-	-	-	-	-	-	11'-0"	13'-0"	-	-	-	-	-	-	-
		28'	8'-6"	10'-7"	12'-8"	-	-	-	-	-	-	12'-7"	-	-	-	-	-	-	-	-
14	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-4"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	4'-0"	5'-0"	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	4'-0"	4'-11"	5'-10"	-	1'-0"	1'-0"	1'-6"	2'-4"	4'-9"	5'-8"	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	4'-3"	5'-4"	6'-1"	-	-	1'-0"	1'-0"	1'-8"	3'-10"	6'-4"	-	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-10"	5'-8"	6'-6"	7'-9"	-	-	1'-0"	1'-0"	2'-9"	5'-2"	8'-0"	-	-	-	-
		18'	1'-0"	1'-0"	1'-10"	4'-1"	6'-10"	7'-9"	-	-	-	1'-0"	2'-2"	4'-5"	6'-9"	-	-	-	-	-
		20'	1'-0"	1'-0"	3'-1"	5'-7"	8'-1"	9'-1"	-	-	-	1'-5"	3'-5"	6'-0"	8'-6"	-	-	-	-	-
		22'	1'-0"	1'-8"	3'-11"	6'-8"	9'-5"	10'-7"	-	-	-	2'-8"	4'-11"	7'-1"	9'-11"	-	-	-	-	-
		24'	1'-0"	3'-1"	5'-6"	7'-11"	10'-11"	-	-	-	-	4'-2"	6'-7"	9'-0"	11'-5"	-	-	-	-	-
		26'	2'-0"	4'-0"	6'-7"	9'-2"	12'-6"	-	-	-	-	5'-2"	7'-9"	10'-5"	13'-0"	-	-	-	-	-
		28'	2'-10"	5'-0"	7'-9"	10'-7"	-	-	-	-	-	6'-11"	9'-1"	11'-11"	-	-	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-4"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	4'-0"	5'-0"	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	4'-0"	4'-11"	5'-10"	-	1'-0"	1'-0"	1'-6"	2'-4"	4'-9"	5'-8"	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	4'-3"	5'-4"	6'-1"	-	-	1'-0"	1'-0"	1'-8"	3'-10"	6'-4"	-	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-10"	5'-8"	6'-6"	7'-9"	-	-	1'-0"	1'-0"	2'-9"	5'-2"	8'-0"	-	-	-	-
		18'	1'-0"	1'-0"	1'-10"	4'-1"	6'-10"	7'-9"	-	-	-	1'-0"	2'-2"	4'-5"	6'-9"	-	-	-	-	-
		20'	1'-0"	1'-0"	3'-1"	5'-7"	8'-1"	9'-1"	-	-	-	1'-5"	3'-5"	6'-0"	8'-6"	-	-	-	-	-
	LPI 36A 56A	22'	1'-0"	1'-8"	3'-11"	6'-8"	9'-5"	10'-7"	-	-	-	2'-8"	4'-11"	7'-1"	9'-11"	-	-	-	-	-
		24'	1'-0"	3'-1"	5'-6"	7'-11"	10'-11"	-	-	-	-	4'-2"	6'-7"	9'-0"	11'-5"	-	-	-	-	-
		26'	2'-0"	4'-0"	6'-7"	9'-2"	12'-6"	-	-	-	-	5'-2"	7'-9"	10'-5"	13'-0"	-	-	-	-	-
		28'	2'-10"	5'-0"	7'-9"	10'-7"	-	-	-	-	-	6'-11"	9'-1"	11'-11"	-	-	-	-	-	-
		30'	3'-10"	6'-10"	9'-1"	12'-1"	-	-	-	-	-	8'-2"	10'-6"	13'-6"	-	-	-	-	-	-

Table 8. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 15 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Maximum Hole Dimension: Depth or Width								Maximum Hole Dimension: Depth or Width							
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
16	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-4"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-7"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	1'-6"	3'-1"	5'-3"	-	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-1"	4'-6"	6'-11"	-	-	-	1'-0"	1'-0"	2'-4"	4'-4"	6'-9"	-	-	-	-
		18'	1'-0"	1'-0"	1'-6"	3'-3"	5'-6"	8'-8"	-	-	-	1'-0"	1'-9"	3'-6"	5'-10"	8'-7"	-	-	-	-
		20'	1'-0"	1'-0"	2'-7"	4'-7"	7'-1"	-	-	-	-	1'-0"	2'-11"	4'-11"	7'-6"	10'-0"	-	-	-	-
		22'	1'-0"	1'-8"	3'-4"	5'-7"	8'-4"	-	-	-	-	2'-8"	4'-4"	6'-7"	8'-9"	-	-	-	-	-
		24'	1'-0"	2'-5"	4'-10"	7'-3"	9'-8"	-	-	-	-	3'-6"	5'-11"	8'-4"	10'-10"	-	-	-	-	-
		26'	2'-0"	4'-0"	5'-11"	8'-6"	11'-2"	-	-	-	-	5'-2"	7'-1"	9'-9"	12'-4"	-	-	-	-	-
		28'	2'-10"	5'-0"	7'-1"	9'-11"	12'-8"	-	-	-	-	6'-3"	9'-1"	11'-2"	14'-0"	-	-	-	-	-
		30'	3'-10"	6'-1"	8'-4"	10'-7"	13'-7"	-	-	-	-	8'-2"	10'-6"	12'-9"	-	-	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-4"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-7"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	1'-6"	3'-1"	5'-3"	-	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-1"	4'-6"	6'-11"	-	-	-	1'-0"	1'-0"	2'-4"	4'-4"	6'-9"	-	-	-	-
		18'	1'-0"	1'-0"	1'-6"	3'-3"	5'-6"	8'-8"	-	-	-	1'-0"	1'-9"	3'-6"	5'-10"	8'-7"	-	-	-	-
		20'	1'-0"	1'-0"	2'-7"	4'-7"	7'-1"	-	-	-	-	1'-0"	2'-11"	4'-11"	7'-6"	10'-0"	-	-	-	-
		22'	1'-0"	1'-8"	3'-4"	5'-7"	8'-4"	-	-	-	-	2'-8"	4'-4"	6'-7"	8'-9"	-	-	-	-	-
		24'	1'-0"	2'-5"	4'-10"	7'-3"	9'-8"	-	-	-	-	3'-6"	5'-11"	8'-4"	10'-10"	-	-	-	-	-
		26'	2'-0"	4'-0"	5'-11"	8'-6"	11'-2"	-	-	-	-	5'-2"	7'-1"	9'-9"	12'-4"	-	-	-	-	-
		28'	2'-10"	5'-0"	7'-1"	9'-11"	12'-8"	-	-	-	-	6'-3"	9'-1"	11'-2"	14'-0"	-	-	-	-	-
		30'	3'-10"	6'-1"	8'-4"	10'-7"	13'-7"	-	-	-	-	8'-2"	10'-6"	12'-9"	-	-	-	-	-	-
18	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-7"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	6'-1"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-2"	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	7'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	6'-0"	-	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-7"	8'-8"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	7'-2"	-	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	6'-1"	-	-	-	1'-0"	1'-0"	1'-6"	2'-5"	5'-6"	9'-0"	-	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	7'-3"	-	-	-	1'-0"	1'-0"	1'-6"	3'-9"	7'-2"	10'-6"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	4'-11"	8'-6"	-	-	-	1'-0"	1'-0"	2'-4"	5'-4"	8'-5"	12'-0"	-	-	-
		26'	1'-0"	1'-0"	1'-6"	3'-4"	6'-7"	9'-10"	-	-	-	1'-0"	1'-0"	3'-10"	6'-5"	9'-9"	-	-	-	-
		28'	1'-0"	1'-0"	1'-6"	4'-3"	7'-10"	11'-4"	-	-	-	1'-0"	2'-0"	4'-10"	8'-4"	11'-11"	-	-	-	-
		30'	1'-0"	1'-0"	2'-4"	5'-4"	9'-1"	12'-11"	-	-	-	1'-0"	3'-8"	6'-8"	9'-9"	13'-6"	-	-	-	-
		32'	1'-0"	1'-0"	3'-3"	6'-6"	9'-8"	13'-9"	-	-	-	2'-4"	4'-9"	8'-0"	11'-2"	15'-3"	-	-	-	-
		34'	1'-0"	1'-9"	4'-4"	7'-9"	11'-2"	15'-5"	-	-	-	3'-4"	5'-11"	9'-4"	12'-9"	16'-2"	-	-	-	-
20	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-4"	5'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-10"	6'-0"	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-4"	5'-9"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-1"	6'-4"	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-4"	6'-11"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-4"	8'-0"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	6'-10"	8'-3"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	5'-10"	-	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-7"	8'-1"	9'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-5"	7'-6"	-	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	6'-2"	9'-6"	-	-	1'-0"	1'-0"	1'-6"	3'-3"	6'-0"	9'-4"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	4'-3"	7'-4"	10'-11"	-	-	1'-0"	1'-0"	1'-9"	4'-9"	7'-2"	10'-10"	-	-	-
		26'	1'-0"	1'-0"	1'-6"	2'-8"	5'-3"	8'-7"	12'-6"	-	-	1'-0"	1'-0"	3'-2"	5'-10"	9'-1"	12'-4"	-	-	-
		28'	1'-0"	1'-0"	1'-6"	3'-7"	6'-5"	9'-11"	13'-5"	-	-	1'-0"	2'-0"	4'-2"	7'-0"	10'-6"	14'-0"	-	-	-
		30'	1'-0"	1'-0"	1'-7"	4'-7"	7'-7"	11'-4"	-	-	-	1'-0"	2'-11"	5'-11"	9'-0"	12'-0"	-	-	-	-
		32'	1'-0"	1'-0"	3'-3"	5'-8"	8'-11"	12'-1"	-	-	-	1'-6"	4'-9"	7'-2"	10'-5"	13'-7"	-	-	-	-
		34'	1'-0"	1'-9"	4'-4"	6'-11"	10'-4"	13'-9"	-	-	-	3'-4"	5'-11"	8'-5"	11'-11"	15'-4"	-	-	-	-
22	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-1"	5'-4"	6'-11"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	6'-5"	8'-0"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-6"	6'-10"	8'-3"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-11"	8'-1"	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	6'-7"	8'-1"	9'-8"	1'-0"	1'-0"	1'-6"	2'-0"	3'-5"	6'-6"	9'-6"	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	5'-0"	7'-10"	9'-6"	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-11"	8'-3"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	6'-1"	9'-1"	10'-11"	-	1'-0"	1'-0"	1'-6"	3'-6"	6'-7"	9'-7"	-	-	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	4'-8"	7'-3"	10'-6"	12'-6"	-	1'-0"	1'-0"	2'-6"	5'-2"	7'-9"	11'-1"	-	-	-
		28'	1'-0"	1'-0"	1'-6"	2'-10"	5'-8"	8'-6"	12'-0"	13'-5"	-	1'-0"	1'-4"	4'-2"	7'-0"	9'-9"	12'-7"	-	-	-
		30'	1'-0"	1'-0"	1'-7"	3'-10"	6'-10"	9'-10"	13'-8"	-	-	1'-0"	2'-11"	5'-2"	8'-3"	11'-3"	14'-3"	-	-	-
		32'	1'-0"	1'-0"	2'-5"	4'-10"	8'-1"	11'-4"	14'-6"	-	-	1'-6"	3'-11"	7'-2"	9'-7"	12'-10"	16'-0"	-	-	-
		34'	1'-0"	1'-0"	3'-6"	6'-0"	9'-5"	12'-10"	16'-3"	-	-	3'-4"	5'-11"	8'-5"	11'-0"	14'-5"	-	-	-	-
		36'	1'-0"	1'-10"	4'-7"	7'-3"	10'-11"	13'-7"	-	-	-	4'-5"	7'-2"	9'-10"	12'-7"	16'-3"	-	-	-	-
		38'	1'-0"	2'-11"	5'-9"	8'-8"	11'-6"	15'-4"	-	-	-	5'-8"	8'-6"	11'-4"	14'-3"	17'-1"	-	-	-	-
24	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-1"	5'-9"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-2"	6'-10"	8'-0"
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-2"	5'-6"	6'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-0"	6'-9"	8'-1"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-7"	6'-7"	8'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	5'-6"	8'-6"	10'-0"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-11"	6'-8"	8'-4"	9'-6"	1'-0"	1'-0"	1'-6"	2'-0"	3'-4"	7'-2"	9'-11"	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-11"	7'-11"	9'-9"	10'-11"	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	8'-5"	12'-0"	-	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	6'-7"	9'-3"	11'-2"	12'-6"	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	9'-5"	-	-	-
		28'	1'-0"	1'-0"	1'-6"	2'-2"	5'-0"	7'-10"	10'-7"	12'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	11'-1"	-	-	-
		30'	1'-0"	1'-0"	1'-6"	3'-1"	6'-1"	9'-1"	12'-1"	13'-8"	-	1'-0"	2'-11"	5'-2"	8'-3"	10'-8"	-	-	-	-
		32'	1'-0"	1'-0"	2'-5"	4'-10"	7'-3"	10'-6"	13'-9"	15'-4"	-	1'-6"	3'-11"	6'-9"	9'-7"	12'-0"	15'-1"	-	-	-
		34'	1'-0"	1'-0"	3'-6"	6'-0"	8'-7"	11'-2"	14'-7"	16'-3"	-	2'-6"	5'-0"	7'-10"	10'-7"	13'-7"	-	-	-	-
		36'	1'-0"	1'-10"	4'-7"	7'-3"	10'-0"	12'-9"	16'-4"	-	-	4'-5"	6'-11"	9'-7"	12'-5"	15'-4"	-	-	-	-
		38'	1'-0"	2'-11"	5'-9"	7'-8"	10'-7"	14'-4"	17'-3"	-	-	5'-8"	8'-6"	11'-3"	14'-2"	17'-0"	-	-	-	-

Table 9. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
9 1/2	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-11"	-	-	-	-	-
		10'	1'-0"	1'-0"	2'-1"	-	-	-	-	-	1'-0"	1'-5"	3'-6"	-	-	-	-	-
		12'	1'-0"	1'-3"	3'-5"	-	-	-	-	-	1'-1"	2'-11"	5'-1"	-	-	-	-	-
		14'	1'-0"	2'-6"	4'-8"	-	-	-	-	-	2'-5"	4'-6"	6'-8"	-	-	-	-	-
		16'	1'-8"	3'-8"	6'-1"	-	-	-	-	-	3'-11"	6'-0"	-	-	-	-	-	-
		18'	2'-9"	5'-0"	7'-4"	-	-	-	-	-	5'-4"	7'-8"	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-2"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-6"	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-10"	1'-0"	1'-0"	1'-8"	-	-	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	-	-	-	-	4'-0"	1'-0"	1'-5"	2'-11"	-	-	-	-	5'-8"
		14'	1'-0"	1'-1"	2'-6"	-	-	-	-	5'-4"	1'-4"	2'-9"	4'-6"	-	-	-	-	-
		16'	1'-0"	2'-1"	3'-8"	-	-	-	-	6'-6"	2'-9"	4'-4"	6'-0"	-	-	-	-	-
		18'	1'-5"	3'-3"	5'-0"	-	-	-	-	8'-2"	4'-0"	5'-10"	7'-8"	-	-	-	-	-
	LPI 300 325	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-1"	1'-0"	1'-0"	1'-8"	-	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-7"	-	-	-	-	3'-5"	1'-0"	1'-0"	3'-3"	-	-	-	-	5'-1"
		14'	1'-0"	1'-0"	2'-10"	-	-	-	-	4'-8"	1'-0"	2'-0"	4'-10"	-	-	-	-	6'-8"
		16'	1'-0"	1'-3"	4'-1"	-	-	-	-	6'-1"	1'-1"	3'-7"	6'-5"	-	-	-	-	-
		18'	1'-0"	2'-4"	5'-0"	-	-	-	-	7'-4"	2'-8"	4'-11"	7'-8"	-	-	-	-	-
		20'	1'-1"	3'-7"	6'-7"	-	-	-	-	8'-7"	3'-11"	6'-6"	9'-6"	-	-	-	-	-
11 7/8	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-4"	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-7"	-	-	-	-	1'-0"	1'-0"	2'-2"	4'-0"	-	-	-	-
		12'	1'-0"	1'-0"	2'-2"	3'-8"	-	-	-	-	1'-0"	2'-0"	3'-10"	5'-8"	-	-	-	-
		14'	1'-0"	1'-10"	3'-3"	5'-0"	-	-	-	-	2'-0"	3'-5"	5'-3"	-	-	-	-	-
		16'	1'-3"	2'-10"	4'-6"	6'-6"	-	-	-	-	3'-7"	5'-2"	6'-9"	-	-	-	-	-
		18'	2'-4"	4'-1"	5'-11"	7'-9"	-	-	-	-	4'-11"	6'-9"	8'-7"	-	-	-	-	-
		20'	3'-7"	5'-1"	7'-1"	9'-1"	-	-	-	-	6'-6"	8'-0"	10'-0"	-	-	-	-	-
		22'	4'-6"	6'-8"	8'-4"	10'-7"	-	-	-	-	7'-8"	9'-11"	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-2"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-0"	1'-0"	1'-0"	2'-0"	3'-3"	-	-	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-10"	-	-	-	5'-4"	1'-0"	2'-0"	3'-5"	4'-10"	-	-	-	
		16'	1'-0"	1'-3"	2'-10"	4'-1"	-	-	-	6'-6"	2'-4"	3'-7"	4'-9"	-	-	-	-	-
		18'	1'-5"	2'-4"	3'-8"	5'-6"	-	-	-	8'-2"	3'-6"	4'-11"	6'-3"	-	-	-	-	-
		20'	2'-7"	3'-7"	5'-1"	6'-7"	-	-	-	9'-7"	4'-11"	6'-6"	8'-0"	-	-	-	-	-
		22'	3'-4"	5'-0"	6'-2"	7'-10"	-	-	-	-	6'-7"	8'-3"	9'-[illegible]	-	-	-	-	-

DESIGN ASSUMPTIONS FOR TABLES 9 TO 10:

1. The hole locations listed above are valid for joists supporting only uniform loads. The total uniform load must not exceed [illegible] psf (i.e. 40 psf Live Load and 25 psf Dead Load, spaced up to 24" oc). The uniform Dead Load must be at least 10 plf.
2. Hole location is measured from the inside face of bearing to the center of a circular or Obround hole, or to the nearest edge of a rectangular hole, from the closest support.
3. Obround holes are (up to) full web-depth holes with semi-circular ends defined by three overlapping circular holes spaced up to 1-[illegible] apart, [illegible] center of holes.
4. The maximum hole depth for circular and rectangular holes is Joist Depth less 4", except the maximum hole depth is 6" for 9-1/2" and 8" [illegible] LPI joists. The maximum hole width for rectangular holes is 18". Where the Maximum Hole Dimension for rectangular holes exceeds the maximum hole depth, the dimension refers to the hole width and the hole depth is assumed to be the maximum for that joist depth.
5. Holes cannot be located in the span where designated "-", without further analysis by a professional engineer (see Note 8 below).
6. Clear Span has NOT been verified for these joists and is shown for informational purposes only! Verify that the joist selected will work for the span and loading conditions needed before checking hole location.

GENERAL NOTES FOR TABLES 9 TO 10:

1. **CUT HOLES CAREFULLY! DO NOT OVERCUT HOLES! DO NOT CUT JOIST FLANGES!**
2. Circular and rectangular holes may be placed anywhere within the depth of the web. A minimum ¼" clear distance is required between the hole and a flange. Obround holes may be up to full web-depth.
3. Round holes up to 1-1/2" diameter may be placed anywhere in the web.
4. Perforated "knockouts" may be neglected when locating web holes.
5. Holes larger than 1-1/2" are not permitted in cantilevers without special engineering.
6. Multiple holes must have a clear separation along the length of the joist of at least twice the length of the larger adjacent hole, or a minimum of 12" center-to-center, whichever is greater. **Exception**: adjacent Obround holes may be spaced as close as 24" clear distance between holes.
7. Multiple holes may be spaced closer provided they fit within the boundary of an acceptable larger hole. Example: two 3" round holes aligned parallel to the joist length may be spaced 2" apart (clear distance) provided that a 3" high by 8" long rectangle or an 8" diameter round hole are acceptable for the joist depth at that location and completely encompass the holes.
8. Larger holes, greater uniform loads or non-uniform loads, and closer proximity to supports and other holes may be possible with further analysis (See Section 6.1 #3 or web hole shear equations listed in Table 6).
9. Not all series are available in all depths. Check availability with a local LP Engineered Wood Products distributor.
10. For SI Units Conversion: 1 in. = 25.4 mm; 1 ft. = 304.8 mm.

Table 9. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
11 7/8	LPI 300 325 350	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-5"	1'-0"	1'-0"	1'-9"	3'-10"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	3'-3"	-	-	-	4'-8"	1'-0"	1'-4"	3'-1"	5'-3"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	2'-6"	4'-6"	-	-	-	6'-1"	1'-0"	2'-4"	4'-4"	6'-9"	-	-	-	-
		18'	1'-0"	1'-5"	3'-8"	5'-11"	-	-	-	7'-4"	1'-9"	4'-0"	5'-10"	8'-7"	-	-	-	-
		20'	1'-0"	2'-7"	4'-7"	7'-1"	-	-	-	8'-7"	3'-5"	5'-5"	7'-6"	10'-0"	-	-	-	-
		22'	1'-8"	3'-11"	6'-2"	8'-4"	-	-	-	10'-0"	4'-11"	6'-7"	9'-4"	-	-	-	-	-
		24'	3'-1"	4'-10"	7'-3"	9'-8"	-	-	-	11'-6"	5'-11"	8'-4"	10'-10"	-	-	-	-	-
	LPI 550	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-2"	-	-	-	3'-5"	1'-0"	1'-0"	1'-9"	3'-10"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	3'-3"	-	-	-	4'-8"	1'-0"	1'-4"	3'-1"	5'-3"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	2'-6"	4'-6"	-	-	-	6'-1"	1'-0"	2'-4"	4'-4"	6'-9"	-	-	-	-
		18'	1'-0"	1'-5"	3'-8"	5'-11"	-	-	-	7'-4"	1'-9"	4'-0"	5'-10"	8'-7"	-	-	-	-
		20'	1'-0"	2'-7"	4'-7"	7'-1"	-	-	-	8'-7"	3'-5"	5'-5"	7'-6"	10'-0"	-	-	-	-
		22'	1'-8"	3'-11"	6'-2"	8'-4"	-	-	-	10'-0"	4'-11"	6'-7"	9'-4"	-	-	-	-	-
		24'	3'-1"	4'-10"	7'-3"	9'-8"	-	-	-	11'-6"	5'-11"	8'-4"	10'-10"	-	-	-	-	-
		26'	4'-0"	5'-11"	8'-6"	11'-2"	-	-	-	-	7'-9"	9'-9"	12'-4"	-	-	-	-	-
		28'	5'-0"	7'-1"	9'-11"	12'-8"	-	-	-	-	9'-1"	11'-2"	14'-0"	-	-	-	-	-
14	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-0"	1'-0"	1'-0"	1'-6"	2'-8"	3'-7"	-	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-2"	3'-3"	-	-	5'-4"	1'-0"	1'-8"	2'-9"	4'-2"	5'-3"	-	-	-
		16'	1'-0"	1'-0"	2'-1"	3'-3"	4'-6"	-	-	6'-6"	1'-11"	3'-2"	4'-4"	5'-7"	6'-9"	-	-	-
		18'	1'-0"	2'-4"	3'-3"	4'-7"	5'-11"	-	-	8'-2"	3'-6"	4'-5"	5'-10"	7'-2"	8'-7"	-	-	-
		20'	2'-1"	3'-1"	4'-7"	5'-7"	7'-1"	-	-	9'-7"	4'-11"	6'-0"	7'-6"	8'-6"	10'-0"	-	-	-
		22'	3'-4"	4'-6"	5'-7"	7'-3"	8'-4"	-	-	-	6'-7"	7'-8"	8'-9"	10'-5"	-	-	-	-
		24'	4'-3"	5'-6"	6'-8"	8'-6"	9'-8"	-	-	-	7'-9"	9'-0"	10'-2"	12'-0"	-	-	-	-
		26'	5'-11"	7'-3"	8'-6"	9'-10"	11'-2"	-	-	-	9'-1"	10'-5"	12'-4"	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-8"	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-4"	4'-2"	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	-	-	4'-8"	1'-0"	1'-0"	2'-0"	3'-10"	5'-11"	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	3'-3"	5'-3"	-	-	6'-1"	1'-0"	1'-11"	3'-7"	5'-7"	7'-7"	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-7"	6'-5"	-	-	7'-4"	1'-9"	3'-1"	4'-11"	6'-9"	9'-0"	-	-	-
		20'	1'-0"	2'-1"	3'-7"	5'-7"	7'-7"	-	-	8'-7"	2'-11"	4'-5"	6'-6"	8'-6"	-	-	-	-
		22'	1'-8"	3'-4"	5'-0"	6'-8"	8'-11"	-	-	10'-0"	4'-4"	6'-0"	8'-3"	9'-11"	-	-	-	-
		24'	2'-5"	4'-3"	6'-1"	8'-6"	10'-4"	-	-	11'-6"	5'-11"	7'-9"	9'-7"	12'-0"	-	-	-	-
		26'	4'-0"	5'-3"	7'-3"	9'-10"	11'-10"	-	-	-	7'-1"	9'-1"	11'-0"	-	-	-	-	-
		28'	5'-0"	6'-4"	8'-6"	10'-7"	13'-5"	-	-	-	9'-1"	10'-6"	12'-7"	-	-	-	-	-
		30'	6'-1"	7'-7"	9'-10"	12'-1"	-	-	-	-	10'-6"	12'-0"	14'-3"	-	-	-	-	-
16	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-11"	3'-10"	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	-	5'-4"	1'-0"	1'-8"	2'-5"	3'-5"	4'-6"	5'-7"	-	-
		16'	1'-0"	1'-0"	1'-8"	2'-6"	3'-8"	4'-11"	-	6'-6"	1'-11"	2'-9"	3'-11"	4'-9"	6'-0"	7'-2"	-	-
		18'	1'-0"	1'-10"	2'-9"	3'-8"	5'-0"	5'-11"	-	8'-2"	3'-6"	4'-5"	5'-4"	6'-3"	7'-8"	9'-0"	-	-
		20'	2'-1"	3'-1"	4'-1"	5'-1"	6'-1"	7'-7"	-	9'-7"	4'-11"	6'-0"	7'-0"	8'-0"	9'-0"	-	-	-
		22'	3'-4"	3'-11"	5'-0"	6'-2"	7'-3"	8'-11"	-	-	6'-0"	7'-1"	8'-3"	9'-4"	11'-0"	-	-	-
		24'	4'-3"	5'-6"	6'-8"	7'-11"	9'-1"	10'-4"	-	-	7'-9"	9'-0"	10'-2"	11'-5"	-	-	-	-
		26'	5'-3"	6'-7"	7'-11"	9'-2"	10'-6"	11'-10"	-	-	9'-1"	10'-5"	11'-8"	13'-0"	-	-	-	-
		28'	7'-1"	7'-9"	9'-2"	9'-11"	11'-4"	12'-8"	-	-	10'-6"	11'-11"	13'-4"	-	-	-	-	-
		30'	8'-4"	9'-1"	10'-7"	11'-4"	12'-10"	14'-4"	-	-	12'-0"	13'-6"	15'-0"	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-1"	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	4'-9"	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-3"	-	4'-8"	1'-0"	1'-0"	1'-8"	3'-1"	4'-6"	6'-4"	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-1"	3'-8"	5'-8"	-	6'-1"	1'-0"	1'-6"	2'-9"	4'-3"	6'-0"	8'-0"	-	-
		18'	1'-0"	1'-0"	1'-10"	3'-3"	5'-0"	6'-10"	-	7'-4"	1'-3"	3'-1"	4'-10"	6'-6"	8'-5"	-	-	-
		20'	1'-0"	1'-7"	3'-1"	4'-7"	6'-7"	8'-1"	-	8'-7"	2'-11"	4'-5"	6'-3"	8'-1"	10'-3"	-	-	-
		22'	1'-2"	2'-10"	4'-6"	6'-2"	7'-10"	10'-0"	-	10'-0"	4'-4"	5'-11"	7'-8"	9'-6"	11'-11"	-	-	-
		24'	2'-5"	3'-8"	5'-6"	7'-3"	9'-1"	10'-11"	-	11'-6"	5'-4"	7'-0"	8'-11"	10'-11"	13'-5"	-	-	-
		26'	3'-4"	5'-3"	6'-7"	8'-6"	10'-6"	12'-6"	-	-	7'-1"	8'-5"	10'-3"	12'-3"	-	-	-	-
		28'	4'-3"	6'-4"	7'-9"	9'-11"	12'-0"	-	-	-	8'-4"	9'-6"	11'-6"	13'-8"	-	-	-	-
		30'	6'-1"	7'-7"	9'-1"	11'-4"	12'-10"	-	-	-	9'-9"	11'-0"	13'-3"	-	-	-	-	-

Table 9. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)															
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support							
			Hole Diameter							Obround Hole	Hole Diameter							Obround Hole
			2"	4"	6"	8"	10"	12"	14"		2"	4"	6"	8"	10"	12"	14"	
9 1/2	LPI 26A	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	1'-6"	-	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	-	1'-0"	1'-0"	2'-8"	-	-	-	-	-
		12'	1'-0"	1'-0"	2'-6"	-	-	-	-	-	1'-0"	2'-0"	4'-2"	-	-	-	-	-
		14'	1'-0"	1'-5"	3'-11"	-	-	-	-	-	1'-0"	3'-5"	5'-11"	-	-	-	-	-
		16'	1'-0"	2'-6"	5'-3"	-	-	-	-	-	2'-4"	4'-9"	7'-7"	-	-	-	-	-
		18'	1'-5"	3'-8"	6'-5"	-	-	-	-	-	4'-0"	6'-3"	9'-0"	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-2"
		8'	1'-0"	1'-0"	1'-6"	-	-	-	-	1'-6"	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	-	-	-	-	2'-10"	1'-0"	1'-0"	1'-6"	-	-	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	-	-	-	-	4'-0"	1'-0"	1'-0"	2'-0"	-	-	-	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	-	-	-	-	5'-4"	1'-0"	1'-8"	3'-5"	-	-	-	-	-
		16'	1'-0"	1'-0"	2'-10"	-	-	-	-	6'-6"	1'-1"	3'-2"	4'-9"	-	-	-	-	-
		18'	1'-0"	1'-10"	3'-8"	-	-	-	-	8'-2"	2'-8"	4'-5"	6'-3"	-	-	-	-	-
11 7/8	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	-	1'-0"	1'-0"	1'-6"	3'-3"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	3'-1"	-	-	-	-	1'-0"	1'-1"	2'-11"	4'-9"	-	-	-	-
		14'	1'-0"	1'-0"	2'-2"	4'-3"	-	-	-	-	1'-0"	2'-5"	4'-2"	6'-4"	-	-	-	-
		16'	1'-0"	1'-8"	3'-8"	5'-8"	-	-	-	-	1'-11"	3'-11"	6'-0"	8'-0"	-	-	-	-
		18'	1'-0"	2'-9"	4'-7"	6'-10"	-	-	-	-	3'-6"	5'-4"	7'-2"	-	-	-	-	-
		20'	2'-1"	4'-1"	6'-1"	8'-7"	-	-	-	-	4'-11"	7'-0"	9'-0"	-	-	-	-	-
		22'	3'-4"	5'-0"	7'-3"	10'-0"	-	-	-	-	6'-7"	8'-3"	10'-5"	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-2"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	4'-0"	1'-0"	1'-0"	1'-6"	2'-4"	-	-	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	5'-4"	1'-0"	1'-0"	2'-5"	3'-10"	-	-	-	-
		16'	1'-0"	1'-0"	1'-8"	3'-3"	-	-	-	6'-6"	1'-0"	2'-4"	3'-7"	5'-2"	-	-	-	-
		18'	1'-0"	1'-5"	2'-9"	4'-1"	-	-	-	8'-2"	2'-2"	3'-6"	5'-4"	6'-9"	-	-	-	-
		20'	1'-1"	2'-1"	4'-1"	5'-7"	-	-	-	9'-7"	3'-5"	4'-11"	6'-6"	8'-6"	-	-	-	-
		22'	1'-8"	3'-4"	5'-0"	6'-8"	-	-	-	-	4'-11"	6'-7"	8'-3"	9'-11"	-	-	-	-
	LPI 36A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-11"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-6"	-	-	-	4'-8"	1'-0"	1'-0"	2'-0"	4'-2"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	6'-1"	1'-0"	1'-1"	3'-2"	6'-0"	-	-	-	-
		18'	1'-0"	1'-0"	2'-4"	4'-7"	-	-	-	7'-4"	1'-0"	2'-2"	4'-11"	7'-2"	-	-	-	-
		20'	1'-0"	1'-1"	3'-7"	6'-1"	-	-	-	8'-7"	1'-5"	3'-11"	6'-0"	9'-0"	-	-	-	-
		22'	1'-0"	2'-3"	4'-6"	7'-3"	-	-	-	10'-0"	2'-8"	4'-11"	7'-8"	10'-5"	-	-	-	-
		24'	1'-3"	3'-1"	6'-1"	8'-6"	-	-	-	11'-6"	4'-2"	6'-7"	9'-0"	-	-	-	-	-
	LPI 56A	6'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"
		8'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	-	-	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-11"	-	-	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-6"	-	-	-	4'-8"	1'-0"	1'-0"	2'-0"	4'-2"	-	-	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	3'-8"	-	-	-	6'-1"	1'-0"	1'-1"	3'-2"	6'-0"	-	-	-	-
		18'	1'-0"	1'-0"	2'-4"	4'-7"	-	-	-	7'-4"	1'-0"	2'-2"	4'-11"	7'-2"	-	-	-	-
		20'	1'-0"	1'-1"	3'-7"	6'-1"	-	-	-	8'-7"	1'-5"	3'-11"	6'-0"	9'-0"	-	-	-	-
		22'	1'-0"	2'-3"	4'-6"	7'-3"	-	-	-	10'-0"	2'-8"	4'-11"	7'-8"	10'-5"	-	-	-	-
		24'	1'-3"	3'-1"	6'-1"	8'-6"	-	-	-	11'-6"	4'-2"	6'-7"	9'-0"	-	-	-	-	-
		26'	2'-0"	4'-7"	7'-3"	9'-10"	-	-	-	-	5'-10"	7'-9"	11'-0"	-	-	-	-	-
		28'	2'-10"	5'-8"	8'-6"	11'-4"	-	-	-	-	6'-11"	9'-9"	12'-7"	-	-	-	-	-
14	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	4'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-8"	-	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	5'-4"	1'-0"	1'-0"	1'-8"	2'-9"	4'-2"	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-1"	3'-8"	-	-	6'-6"	1'-0"	1'-11"	3'-2"	4'-4"	6'-0"	-	-	-
		18'	1'-0"	1'-0"	1'-10"	3'-3"	4'-7"	-	-	8'-2"	1'-9"	3'-1"	4'-5"	5'-10"	7'-2"	-	-	-
		20'	1'-0"	2'-1"	3'-1"	4'-7"	6'-1"	-	-	9'-7"	3'-5"	4'-5"	6'-0"	7'-6"	9'-0"	-	-	-
		22'	1'-8"	2'-10"	4'-6"	5'-7"	7'-3"	-	-	-	4'-11"	6'-0"	7'-8"	8'-9"	10'-5"	-	-	-
		24'	3'-1"	4'-3"	5'-6"	7'-3"	8'-6"	-	-	-	5'-11"	7'-9"	9'-0"	10'-10"	12'-0"	-	-	-
		26'	4'-0"	5'-3"	6'-7"	8'-6"	9'-10"	-	-	-	7'-9"	9'-1"	10'-5"	12'-4"	-	-	-	-
		28'	5'-0"	6'-4"	7'-9"	9'-11"	11'-4"	-	-	-	9'-1"	10'-6"	11'-11"	14'-0"	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	1'-0"	1'-0"	1'-0"	1'-6"	[illegible]	[illegible]	-	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	2'-1"	1'-0"	1'-0"	[illegible]	[illegible]	[illegible]	-	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	-	-	3'-5"	1'-0"	1'-0"	[illegible]	[illegible]	[illegible]	[illegible]	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	-	-	4'-8"	1'-0"	1'-0"	[illegible]	[illegible]	[illegible]	[illegible]	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-1"	4'-1"	-	-	6'-1"	1'-0"	[illegible]	[illegible]	[illegible]	6'-5"	[illegible]	-	-
		18'	1'-0"	1'-0"	1'-6"	3'-3"	5'-6"	-	-	7'-4"	1'-0"	[illegible]	[illegible]	[illegible]	8'-1"	-	-	-
		20'	1'-0"	1'-0"	2'-7"	4'-7"	6'-7"	-	-	8'-7"	1'-0"	[illegible]	4'-11"	[illegible]	[illegible]	-	-	-
		22'	1'-0"	1'-8"	3'-4"	5'-7"	8'-4"	-	-	10'-0"	2'-8"	[illegible]	6'-7"	[illegible]	[illegible]	-	-	-
		24'	1'-0"	2'-5"	4'-10"	6'-8"	9'-8"	-	-	11'-6"	4'-2"	[illegible]	7'-9"	[illegible]	[illegible]	-	-	-
		26'	2'-0"	4'-0"	5'-11"	7'-11"	10'-6"	-	-	-	5'-2"	[illegible]	9'-9"	[illegible]	[illegible]	-	-	-
		28'	2'-10"	5'-0"	7'-1"	9'-2"	12'-0"	-	-	-	6'-11"	9'-1"	[illegible]	[illegible]	[illegible]	-	-	-
		30'	3'-10"	6'-1"	8'-4"	10'-7"	13'-7"	-	-	-	8'-2"	10'-6"	[illegible]	[illegible]	[illegible]	-	-	-

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Table 9. Circular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Circular Holes (including Obround Holes)														
			Distance from End Suport							Distance from Interior Support or Cantilever-End Support							
			Hole Diameter						Obround	Hole Diameter						Obround	
			2"	4"	6"	8"	10"	12"	14"	Hole	2"	4"	6"	8"	10"	12"	14"	Hole
16	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-7"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-10"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-3"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	4'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	-	5'-8"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	5'-4"	1'-0"	1'-0"	1'-6"	2'-5"	3'-5"	4'-6"	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	-	6'-6"	1'-0"	1'-6"	2'-9"	3'-7"	4'-9"	6'-0"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-9"	3'-8"	5'-0"	-	8'-2"	1'-9"	2'-8"	4'-0"	4'-11"	6'-3"	7'-8"	-	-
		20'	1'-0"	1'-7"	2'-7"	3'-7"	5'-1"	6'-7"	-	9'-7"	2'-11"	4'-5"	5'-5"	6'-6"	8'-0"	9'-6"	-	-
		22'	1'-8"	2'-10"	3'-11"	5'-0"	6'-2"	7'-10"	-	-	4'-4"	5'-5"	7'-1"	8'-3"	9'-4"	11'-0"	-	-
		24'	2'-5"	3'-8"	4'-10"	6'-1"	7'-3"	9'-1"	-	-	5'-11"	7'-2"	8'-4"	9'-7"	11'-5"	-	-	-
		26'	4'-0"	5'-3"	5'-11"	7'-3"	9'-2"	10'-6"	-	-	7'-1"	8'-5"	9'-9"	11'-0"	13'-0"	-	-	-
		28'	5'-0"	6'-4"	7'-9"	8'-6"	9'-11"	12'-0"	-	-	9'-1"	10'-6"	11'-2"	13'-4"	-	-	-	-
		30'	6'-1"	7'-7"	8'-4"	9'-10"	11'-4"	12'-10"	-	-	10'-6"	12'-0"	13'-6"	14'-3"	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-0"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	1'-11"
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	2'-1"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-6"
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	3'-5"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-10"	-	5'-1"
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	-	4'-8"	1'-0"	1'-0"	1'-6"	2'-0"	3'-5"	5'-7"	-	6'-8"
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	4'-11"	-	6'-1"	1'-0"	1'-0"	1'-6"	3'-2"	5'-2"	7'-2"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-4"	4'-1"	5'-11"	-	7'-4"	1'-0"	1'-3"	3'-1"	4'-5"	6'-9"	9'-0"	-	-
		20'	1'-0"	1'-0"	1'-7"	3'-7"	5'-1"	7'-7"	-	8'-7"	1'-0"	2'-5"	4'-3"	6'-0"	8'-0"	-	-	-
		22'	1'-0"	1'-2"	2'-10"	4'-6"	6'-8"	8'-11"	-	10'-0"	2'-1"	3'-9"	5'-5"	7'-8"	9'-11"	-	-	-
		24'	1'-0"	1'-10"	3'-8"	5'-6"	7'-11"	10'-4"	-	11'-6"	3'-6"	5'-4"	7'-2"	9'-0"	11'-5"	-	-	-
		26'	1'-4"	3'-4"	5'-3"	7'-3"	9'-2"	11'-10"	-	-	5'-2"	6'-5"	8'-5"	11'-0"	13'-0"	-	-	-
		28'	2'-10"	4'-3"	6'-4"	8'-6"	10'-7"	12'-8"	-	-	6'-3"	8'-4"	10'-6"	12'-7"	-	-	-	-
		30'	3'-10"	5'-4"	7'-7"	9'-10"	12'-1"	14'-4"	-	-	8'-2"	9'-9"	12'-0"	14'-3"	-	-	-	-
18	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-6"	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	6'-0"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-1"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-8"	4'-11"	7'-8"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	6'-1"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	6'-6"	9'-0"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	7'-3"	-	1'-0"	1'-0"	1'-6"	2'-8"	5'-5"	7'-8"	11'-0"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	6'-1"	8'-6"	-	1'-0"	1'-0"	1'-9"	4'-2"	6'-7"	9'-7"	-	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	4'-8"	7'-3"	9'-10"	-	1'-0"	1'-2"	3'-2"	5'-10"	8'-5"	11'-1"	-	-
		28'	1'-0"	1'-0"	1'-6"	3'-7"	5'-8"	8'-6"	11'-4"	-	1'-0"	2'-9"	4'-10"	7'-0"	9'-9"	12'-7"	-	-
		30'	1'-0"	1'-0"	2'-4"	4'-7"	6'-10"	9'-10"	12'-11"	-	1'-5"	3'-8"	5'-11"	8'-3"	11'-3"	14'-3"	-	-
		32'	1'-0"	1'-0"	3'-3"	5'-8"	8'-1"	11'-4"	14'-6"	-	3'-1"	4'-9"	7'-2"	10'-5"	12'-10"	16'-0"	-	-
		34'	1'-0"	1'-9"	4'-4"	6'-11"	9'-5"	12'-0"	15'-5"	-	4'-2"	6'-9"	9'-4"	11'-11"	14'-5"	-	-	-
20	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-11"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	5'-4"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-1"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	5'-0"	7'-0"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-4"	5'-7"	-	1'-0"	1'-0"	1'-6"	2'-1"	3'-9"	6'-0"	8'-10"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-3"	6'-8"	-	1'-0"	1'-0"	1'-6"	3'-6"	5'-4"	7'-9"	10'-2"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	3'-4"	5'-3"	7'-11"	-	1'-0"	1'-0"	2'-6"	4'-6"	7'-1"	9'-1"	11'-8"	-
		28'	1'-0"	1'-0"	1'-6"	2'-2"	4'-3"	6'-5"	9'-3"	-	1'-0"	2'-0"	4'-2"	6'-3"	8'-4"	10'-6"	13'-4"	-
		30'	1'-0"	1'-0"	1'-7"	3'-1"	5'-4"	8'-4"	10'-7"	-	1'-5"	2'-11"	5'-2"	7'-5"	9'-9"	12'-0"	15'-0"	-
		32'	1'-0"	1'-0"	2'-5"	4'-10"	6'-6"	8'-11"	12'-1"	-	2'-4"	4'-9"	6'-4"	8'-9"	11'-2"	13'-7"	-	-
		34'	1'-0"	1'-9"	3'-6"	6'-0"	7'-9"	10'-4"	13'-9"	-	4'-2"	5'-11"	8'-5"	10'-2"	12'-9"	15'-4"	-	-
22	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-0"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	5'-6"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-11"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-3"	4'-11"	7'-2"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-1"	4'-11"	-	1'-0"	1'-0"	1'-6"	2'-4"	4'-2"	6'-7"	8'-5"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-0"	6'-7"	-	1'-0"	1'-0"	1'-10"	3'-10"	5'-10"	7'-9"	10'-5"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	3'-7"	5'-8"	7'-10"	-	1'-0"	1'-4"	3'-5"	5'-7"	7'-0"	9'-1"	11'-11"	-
		30'	1'-0"	1'-0"	1'-6"	2'-4"	4'-7"	6'-10"	9'-1"	-	1'-5"	2'-11"	4'-5"	6'-8"	9'-0"	11'-3"	13'-6"	-
		32'	1'-0"	1'-0"	1'-8"	4'-1"	5'-8"	8'-1"	10'-6"	-	2'-4"	3'-11"	6'-4"	8'-0"	10'-5"	12'-10"	15'-3"	-
		34'	1'-0"	1'-0"	2'-7"	5'-2"	6'-11"	9'-5"	11'-2"	-	3'-4"	5'-11"	7'-7"	9'-4"	11'-11"	14'-5"	17'-0"	-
		36'	1'-0"	1'-10"	3'-8"	6'-5"	8'-2"	10'-0"	12'-9"	-	5'-4"	7'-2"	8'-11"	10'-9"	13'-6"	15'-4"	18'-0"	-
		38'	1'-0"	2'-11"	4'-10"	7'-8"	9'-7"	11'-6"	14'-4"	-	6'-7"	8'-6"	10'-5"	12'-4"	15'-2"	17'-1"	-	-
24	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-5"	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-9"	6'-0"	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-8"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-6"	5'-4"	7'-2"	-
		26'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-4"	5'-3"	-	1'-0"	1'-0"	1'-10"	3'-2"	5'-2"	7'-1"	9'-1"	-
		28'	1'-0"	1'-0"	1'-6"	2'-0"	2'-10"	4'-3"	6'-5"	-	1'-0"	1'-4"	2'-[illegible]	[illegible]	[illegible]	6'-3"	8'-4"	10'-6"	-
		30'	1'-0"	1'-0"	1'-6"	2'-4"	3'-10"	5'-4"	7'-7"	-	1'-0"	2'-11"	[illegible]	[illegible]	[illegible]	[illegible]	9'-9"	12'-0"	-
		32'	1'-0"	1'-0"	1'-8"	3'-3"	4'-10"	6'-6"	8'-11"	-	2'-4"	3'-[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11'-2"	13'-7"	-
		34'	1'-0"	1'-0"	2'-7"	4'-4"	6'-0"	7'-9"	10'-4"	-	3'-4"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	12'-9"	15'-4"	-
		36'	1'-0"	1'-10"	3'-8"	5'-6"	7'-3"	9'-1"	11'-10"	-	5'-4"	6'-3"	[illegible]	[illegible]	[illegible]	[illegible]	14'-5"	17'-1"	-
		38'	1'-0"	2'-11"	4'-10"	6'-9"	8'-8"	10'-7"	12'-6"	-	6'-7"	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	18'-1"	-

Table 10. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
9 1/2	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-7"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-10"	2'-3"	2'-8"	3'-1"	3'-6"	-	-	1'-0"	1'-9"	3'-0"	3'-5"	3'-10"	-	-	-	-
		10'	1'-0"	1'-10"	3'-1"	3'-7"	4'-1"	4'-4"	4'-10"	-	-	1'-8"	3'-3"	4'-9"	5'-0"	-	-	-	-	-
		12'	1'-7"	2'-9"	4'-7"	4'-11"	5'-6"	5'-10"	-	-	-	3'-3"	4'-9"	-	-	-	-	-	-	-
		14'	2'-10"	4'-3"	5'-8"	6'-5"	6'-9"	-	-	-	-	4'-10"	6'-4"	-	-	-	-	-	-	-
		16'	4'-1"	5'-3"	7'-4"	7'-9"	-	-	-	-	-	6'-5"	8'-0"	-	-	-	-	-	-	-
		18'	5'-0"	6'-10"	8'-8"	-	-	-	-	-	-	7'-8"	-	-	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-7"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-10"	2'-3"	2'-8"	3'-1"	3'-6"	-	-	1'-0"	1'-9"	3'-0"	3'-5"	3'-10"	-	-	-	-
		10'	1'-0"	1'-10"	3'-1"	3'-7"	4'-1"	4'-4"	4'-10"	-	-	1'-8"	3'-3"	4'-9"	5'-0"	-	-	-	-	-
		12'	1'-7"	2'-9"	4'-7"	4'-11"	5'-6"	5'-10"	-	-	-	3'-3"	4'-9"	-	-	-	-	-	-	-
		14'	2'-10"	4'-3"	5'-8"	6'-5"	6'-9"	-	-	-	-	4'-10"	6'-4"	-	-	-	-	-	-	-
		16'	4'-1"	5'-3"	7'-4"	7'-9"	-	-	-	-	-	6'-5"	8'-0"	-	-	-	-	-	-	-
		18'	5'-0"	6'-10"	8'-8"	-	-	-	-	-	-	7'-8"	-	-	-	-	-	-	-	-
	LPI 300 325	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-7"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-10"	2'-3"	2'-8"	3'-1"	3'-6"	-	-	1'-0"	1'-9"	3'-0"	3'-5"	3'-10"	-	-	-	-
		10'	1'-0"	1'-10"	3'-1"	3'-7"	4'-1"	4'-4"	4'-10"	-	-	1'-8"	3'-3"	4'-9"	5'-0"	-	-	-	-	-
		12'	1'-7"	2'-9"	4'-7"	4'-11"	5'-6"	5'-10"	-	-	-	3'-3"	4'-9"	-	-	-	-	-	-	-
		14'	2'-10"	4'-3"	5'-8"	6'-5"	6'-9"	-	-	-	-	4'-10"	6'-4"	-	-	-	-	-	-	-
		16'	4'-1"	5'-3"	7'-4"	7'-9"	-	-	-	-	-	6'-5"	8'-0"	-	-	-	-	-	-	-
		18'	5'-0"	6'-10"	8'-8"	-	-	-	-	-	-	7'-8"	-	-	-	-	-	-	-	-
		20'	6'-7"	8'-1"	-	-	-	-	-	-	-	9'-6"	-	-	-	-	-	-	-	-
11 7/8	LPI 100 125 150	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-6"	2'-11"	3'-4"	3'-11"	-	-	1'-0"	1'-4"	2'-4"	3'-7"	-	-	-	-	-
		10'	1'-0"	1'-4"	2'-7"	3'-10"	4'-4"	4'-10"	-	-	-	1'-8"	2'-8"	4'-0"	-	-	-	-	-	-
		12'	1'-3"	2'-6"	3'-8"	5'-2"	5'-10"	-	-	-	-	2'-11"	4'-2"	5'-5"	-	-	-	-	-	-
		14'	2'-6"	3'-7"	5'-0"	6'-9"	-	-	-	-	-	4'-6"	5'-11"	-	-	-	-	-	-	-
		16'	3'-8"	4'-11"	6'-6"	-	-	-	-	-	-	6'-0"	7'-2"	-	-	-	-	-	-	-
		18'	5'-0"	6'-5"	7'-9"	-	-	-	-	-	-	7'-8"	9'-0"	-	-	-	-	-	-	-
		20'	6'-1"	7'-7"	9'-1"	-	-	-	-	-	-	9'-0"	-	-	-	-	-	-	-	-
		22'	7'-10"	8'-11"	10'-7"	-	-	-	-	-	-	11'-0"	-	-	-	-	-	-	-	-
	LPI 200 225 250	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-6"	2'-11"	3'-4"	3'-11"	-	-	1'-0"	1'-4"	2'-4"	3'-7"	-	-	-	-	-
		10'	1'-0"	1'-4"	2'-7"	3'-10"	4'-4"	4'-10"	-	-	-	1'-8"	2'-8"	4'-0"	-	-	-	-	-	-
		12'	1'-3"	2'-6"	3'-8"	5'-2"	5'-10"	-	-	-	-	2'-11"	4'-2"	5'-5"	-	-	-	-	-	-
		14'	2'-6"	3'-7"	5'-0"	6'-9"	-	-	-	-	-	4'-6"	5'-11"	-	-	-	-	-	-	-
		16'	3'-8"	4'-11"	6'-6"	-	-	-	-	-	-	6'-0"	7'-2"	-	-	-	-	-	-	-
		18'	5'-0"	6'-5"	7'-9"	-	-	-	-	-	-	7'-8"	9'-0"	-	-	-	-	-	-	-
		20'	6'-1"	7'-7"	9'-1"	-	-	-	-	-	-	9'-0"	-	-	-	-	-	-	-	-
		22'	7'-10"	8'-11"	10'-7"	-	-	-	-	-	-	11'-0"	-	-	-	-	-	-	-	-
	LPI 300 325 350	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-6"	2'-11"	3'-4"	3'-11"	-	-	1'-0"	1'-4"	2'-4"	3'-7"	-	-	-	-	-
		10'	1'-0"	1'-4"	2'-7"	3'-10"	4'-4"	4'-10"	-	-	-	1'-8"	2'-8"	4'-0"	-	-	-	-	-	-
		12'	1'-3"	2'-6"	3'-8"	5'-2"	5'-10"	-	-	-	-	2'-11"	4'-2"	5'-5"	-	-	-	-	-	-
		14'	2'-6"	3'-7"	5'-0"	6'-9"	-	-	-	-	-	4'-6"	5'-11"	-	-	-	-	-	-	-
		16'	3'-8"	4'-11"	6'-6"	-	-	-	-	-	-	6'-0"	7'-2"	-	-	-	-	-	-	-
		18'	5'-0"	6'-5"	7'-9"	-	-	-	-	-	-	7'-8"	9'-0"	-	-	-	-	-	-	-
		20'	6'-1"	7'-7"	9'-1"	-	-	-	-	-	-	9'-0"	-	-	-	-	-	-	-	-
		22'	7'-10"	8'-11"	10'-7"	-	-	-	-	-	-	11'-0"	-	-	-	-	-	-	-	-
		24'	9'-1"	10'-4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	LPI 550	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-6"	2'-11"	3'-4"	3'-11"	-	-	1'-0"	1'-4"	2'-4"	3'-7"	-	-	-	-	-
		10'	1'-0"	1'-4"	2'-7"	3'-10"	4'-4"	4'-10"	-	-	-	1'-8"	2'-8"	4'-0"	-	-	-	-	-	-
		12'	1'-3"	2'-6"	3'-8"	5'-2"	5'-10"	-	-	-	-	2'-11"	4'-2"	5'-5"	-	-	-	-	-	-
		14'	2'-6"	3'-7"	5'-0"	6'-9"	-	-	-	-	-	4'-6"	5'-11"	-	-	-	-	-	-	-
		16'	3'-8"	4'-11"	6'-6"	-	-	-	-	-	-	6'-0"	7'-2"	-	-	-	-	-	-	-
		18'	5'-0"	6'-5"	7'-9"	-	-	-	-	-	-	7'-8"	9'-0"	-	-	-	-	-	-	-
		20'	6'-1"	7'-7"	9'-1"	-	-	-	-	-	-	9'-0"	-	-	-	-	-	-	-	-
		22'	7'-10"	8'-11"	10'-7"	-	-	-	-	-	-	11'-0"	-	-	-	-	-	-	-	-
		24'	9'-1"	10'-4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		26'	10'-6"	11'-10"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		28'	11'-4"	13'-5"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-5"	2'-0"	2'-6"	3'-0"	3'-6"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	3'-7"	4'-4"	-	-	1'-0"	1'-4"	1'-9"	2'-4"	2'-11"	3'-6"	4'-4"	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-6"	4'-4"	5'-2"	5'-10"	-	-	1'-0"	2'-4"	2'-11"	3'-6"	4'-4"	5'-2"	-	-	-
		14'	1'-0"	1'-0"	1'-10"	3'-7"	5'-8"	6'-5"	-	-	-	1'-0"	3'-3"	4'-1"	4'-11"	5'-8"	6'-5"	-	-	-
		16'	1'-0"	1'-3"	3'-3"	4'-11"	7'-4"	7'-9"	-	-	-	1'-11"	4'-2"	5'-2"	6'-2"	7'-4"	7'-9"	-	-	-

Table 10. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
14	LPI 200 225 250	18'	1'-0"	2'-9"	4'-1"	6'-5"	8'-8"	-	-	-	-	3'-6"	4'-11"	6'-9"	9'-0"	-	-	-	-	-
		20'	2'-1"	3'-7"	5'-7"	7'-7"	-	-	-	-	-	4'-11"	6'-6"	8'-6"	-	-	-	-	-	-
		22'	3'-4"	5'-0"	6'-8"	8'-11"	-	-	-	-	-	6'-0"	8'-3"	9'-11"	-	-	-	-	-	-
		24'	4'-3"	6'-1"	7'-11"	10'-4"	-	-	-	-	-	7'-9"	9'-7"	12'-0"	-	-	-	-	-	-
		26'	5'-3"	7'-3"	9'-2"	11'-10"	-	-	-	-	-	9'-1"	11'-0"	-	-	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	3'-7"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	3'-7"	4'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-6"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-6"	4'-4"	5'-2"	5'-10"	-	-	1'-0"	1'-0"	2'-4"	4'-2"	-	-	-	-	-
		14'	1'-0"	1'-0"	1'-10"	3'-7"	5'-8"	6'-5"	-	-	-	1'-0"	2'-0"	3'-10"	5'-7"	-	-	-	-	-
		16'	1'-0"	1'-3"	3'-3"	4'-11"	7'-4"	7'-9"	-	-	-	1'-11"	3'-7"	5'-2"	7'-2"	-	-	-	-	-
		18'	1'-0"	2'-9"	4'-1"	6'-5"	8'-8"	-	-	-	-	3'-6"	4'-11"	6'-9"	9'-0"	-	-	-	-	-
		20'	2'-1"	3'-7"	5'-7"	7'-7"	-	-	-	-	-	4'-11"	6'-6"	8'-6"	-	-	-	-	-	-
		22'	3'-4"	5'-0"	6'-8"	8'-11"	-	-	-	-	-	6'-0"	8'-3"	9'-11"	-	-	-	-	-	-
		24'	4'-3"	6'-1"	7'-11"	10'-4"	-	-	-	-	-	7'-9"	9'-7"	12'-0"	-	-	-	-	-	-
		26'	5'-3"	7'-3"	9'-2"	11'-10"	-	-	-	-	-	9'-1"	11'-0"	-	-	-	-	-	-	-
		28'	7'-1"	8'-6"	10'-7"	13'-5"	-	-	-	-	-	10'-6"	12'-7"	-	-	-	-	-	-	-
		30'	8'-4"	9'-10"	12'-1"	14'-4"	-	-	-	-	-	12'-9"	14'-3"	-	-	-	-	-	-	-
16	LPI 200 225 250	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-0"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-1"	4'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-2"	3'-9"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-5"	5'-6"	-	-	-	1'-0"	1'-0"	2'-0"	3'-7"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	4'-8"	6'-9"	-	-	-	1'-0"	2'-0"	3'-5"	4'-10"	7'-0"	-	-	-	-
		16'	1'-0"	1'-3"	2'-6"	4'-1"	6'-1"	-	-	-	-	1'-11"	3'-2"	4'-9"	6'-9"	-	-	-	-	-
		18'	1'-0"	2'-4"	3'-8"	5'-6"	7'-4"	-	-	-	-	3'-1"	4'-11"	6'-3"	8'-1"	-	-	-	-	-
		20'	2'-1"	3'-7"	5'-1"	7'-1"	9'-1"	-	-	-	-	4'-5"	6'-6"	8'-0"	10'-0"	-	-	-	-	-
		22'	2'-10"	4'-6"	6'-2"	8'-4"	10'-7"	-	-	-	-	6'-0"	7'-8"	9'-4"	-	-	-	-	-	-
		24'	4'-3"	6'-1"	7'-11"	9'-8"	11'-6"	-	-	-	-	7'-9"	9'-7"	11'-5"	-	-	-	-	-	-
		26'	5'-3"	7'-3"	9'-2"	11'-2"	-	-	-	-	-	9'-1"	11'-0"	13'-0"	-	-	-	-	-	-
		28'	6'-4"	8'-6"	9'-11"	12'-0"	-	-	-	-	-	10'-6"	12'-7"	-	-	-	-	-	-	-
		30'	7'-7"	9'-10"	11'-4"	13'-7"	-	-	-	-	-	12'-0"	14'-3"	-	-	-	-	-	-	-
	LPI 300 325 350 550	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-0"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-1"	4'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-2"	3'-9"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-5"	5'-6"	-	-	-	1'-0"	1'-0"	2'-0"	3'-7"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	4'-8"	6'-9"	-	-	-	1'-0"	2'-0"	3'-5"	4'-10"	7'-0"	-	-	-	-
		16'	1'-0"	1'-3"	2'-6"	4'-1"	6'-1"	-	-	-	-	1'-11"	3'-2"	4'-9"	6'-9"	-	-	-	-	-
		18'	1'-0"	2'-4"	3'-8"	5'-6"	7'-4"	-	-	-	-	3'-1"	4'-11"	6'-3"	8'-1"	-	-	-	-	-
		20'	2'-1"	3'-7"	5'-1"	7'-1"	9'-1"	-	-	-	-	4'-5"	6'-6"	8'-0"	10'-0"	-	-	-	-	-
		22'	2'-10"	4'-6"	6'-2"	8'-4"	10'-7"	-	-	-	-	6'-0"	7'-8"	9'-4"	-	-	-	-	-	-
		24'	4'-3"	6'-1"	7'-11"	9'-8"	11'-6"	-	-	-	-	7'-9"	9'-7"	11'-5"	-	-	-	-	-	-
		26'	5'-3"	7'-3"	9'-2"	11'-2"	-	-	-	-	-	9'-1"	11'-0"	13'-0"	-	-	-	-	-	-
		28'	6'-4"	8'-6"	9'-11"	12'-0"	-	-	-	-	-	10'-6"	12'-7"	-	-	-	-	-	-	-
		30'	7'-7"	9'-10"	11'-4"	13'-7"	-	-	-	-	-	12'-0"	14'-3"	-	-	-	-	-	-	-
9 1/2	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	2'-7"	3'-0"	3'-5"	4'-0"	-	-	-
		10'	1'-0"	1'-1"	2'-7"	3'-1"	3'-7"	4'-1"	4'-7"	-	-	1'-0"	2'-5"	4'-0"	4'-6"	5'-0"	-	-	-	-
		12'	1'-0"	2'-2"	4'-0"	4'-4"	4'-11"	5'-6"	-	-	-	2'-4"	3'-10"	5'-8"	-	-	-	-	-	-
		14'	1'-10"	3'-3"	5'-4"	5'-8"	6'-5"	6'-9"	-	-	-	3'-10"	5'-3"	-	-	-	-	-	-	-
		16'	2'-10"	4'-6"	6'-6"	6'-11"	7'-9"	-	-	-	-	5'-2"	6'-9"	-	-	-	-	-	-	-
		18'	4'-1"	5'-11"	7'-9"	8'-8"	-	-	-	-	-	6'-9"	8'-7"	-	-	-	-	-	-	-
	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	2'-7"	3'-0"	3'-5"	4'-0"	-	-	-
		10'	1'-0"	1'-1"	2'-7"	3'-1"	3'-7"	4'-1"	4'-7"	-	-	1'-0"	2'-5"	4'-0"	4'-6"	5'-0"	-	-	-	-
		12'	1'-0"	2'-2"	4'-0"	4'-4"	4'-11"	5'-6"	-	-	-	2'-4"	3'-10"	5'-8"	-	-	-	-	-	-
		14'	1'-10"	3'-3"	5'-4"	5'-8"	6'-5"	6'-9"	-	-	-	3'-10"	5'-3"	-	-	-	-	-	-	-
		16'	2'-10"	4'-6"	6'-6"	6'-11"	7'-9"	-	-	-	-	5'-2"	6'-9"	-	-	-	-	-	-	-
		18'	4'-1"	5'-11"	7'-9"	8'-8"	-	-	-	-	-	6'-9"	8'-7"	-	-	-	-	-	-	-
11 7/8	LPI 26A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-1"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-8"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-9"	-	-	-	-	3'-5"	4'-[illegible]	[illegible]	-	-	-	-	-	-
		16'	2'-10"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	[illegible]	[illegible]	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	[illegible]	[illegible]	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	[illegible]	[illegible]	-	-	-	-	-	-
		22'	6'-2"	7'-10"	10'-0"	-	-	-	-	-	-	9'-4"	[illegible]	[illegible]	-	-	-	-	-	-

Table 10. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																	
			Distance from End Suport									Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width									Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
11 7/8	LPI 30A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-1"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-9"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-10"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	10'-0"	-	-	-	-	-	-	9'-4"	-	-	-	-	-	-	-	-
	LPI 36A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-1"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-9"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-10"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	10'-0"	-	-	-	-	-	-	9'-4"	-	-	-	-	-	-	-	-
		24'	7'-11"	9'-1"	10'-11"	-	-	-	-	-	-	11'-5"	-	-	-	-	-	-	-	-
	LPI 56A	6'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	-	-	-
		8'	1'-0"	1'-0"	1'-6"	2'-1"	2'-6"	3'-1"	3'-6"	-	-	1'-0"	1'-0"	1'-9"	3'-2"	3'-7"	-	-	-	-
		10'	1'-0"	1'-0"	1'-10"	3'-4"	3'-10"	4'-4"	4'-10"	-	-	1'-0"	1'-11"	3'-3"	4'-9"	-	-	-	-	-
		12'	1'-0"	1'-7"	3'-1"	4'-7"	5'-2"	5'-10"	-	-	-	2'-0"	3'-3"	4'-9"	-	-	-	-	-	-
		14'	1'-5"	2'-10"	4'-3"	6'-1"	6'-9"	-	-	-	-	3'-5"	4'-10"	6'-4"	-	-	-	-	-	-
		16'	2'-10"	4'-1"	5'-8"	7'-4"	-	-	-	-	-	4'-9"	6'-5"	8'-0"	-	-	-	-	-	-
		18'	3'-8"	5'-6"	6'-10"	8'-8"	-	-	-	-	-	6'-3"	8'-1"	-	-	-	-	-	-	-
		20'	5'-1"	6'-7"	8'-1"	-	-	-	-	-	-	8'-0"	9'-6"	-	-	-	-	-	-	-
		22'	6'-2"	7'-10"	10'-0"	-	-	-	-	-	-	9'-4"	-	-	-	-	-	-	-	-
		24'	7'-11"	9'-1"	10'-11"	-	-	-	-	-	-	11'-5"	-	-	-	-	-	-	-	-
		26'	9'-2"	10'-6"	12'-6"	-	-	-	-	-	-	13'-0"	-	-	-	-	-	-	-	-
		28'	10'-7"	12'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	4'-9"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	4'-7"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	3'-3"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	5'-0"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	2'-9"	4'-10"	-	-	-	-	-
		16'	1'-0"	1'-0"	2'-1"	4'-1"	6'-6"	7'-4"	-	-	-	1'-0"	2'-4"	4'-4"	6'-5"	-	-	-	-	-
		18'	1'-0"	1'-5"	3'-3"	5'-6"	7'-9"	8'-8"	-	-	-	1'-9"	3'-6"	5'-10"	8'-1"	-	-	-	-	-
		20'	1'-0"	2'-7"	4'-7"	6'-7"	9'-1"	-	-	-	-	2'-11"	4'-11"	7'-0"	9'-6"	-	-	-	-	-
		22'	1'-8"	3'-4"	5'-7"	7'-10"	10'-7"	-	-	-	-	4'-4"	6'-7"	8'-9"	11'-0"	-	-	-	-	-
		24'	2'-5"	4'-10"	6'-8"	9'-1"	-	-	-	-	-	5'-11"	7'-9"	10'-2"	-	-	-	-	-	-
		26'	4'-0"	5'-11"	7'-11"	10'-6"	-	-	-	-	-	7'-9"	9'-9"	11'-8"	-	-	-	-	-	-
		28'	5'-0"	7'-1"	9'-2"	12'-0"	-	-	-	-	-	9'-1"	11'-2"	13'-4"	-	-	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-10"	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	3'-1"	3'-10"	4'-10"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	4'-9"	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	4'-7"	5'-2"	-	-	1'-0"	1'-0"	1'-6"	3'-3"	5'-5"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-10"	5'-0"	5'-8"	6'-9"	-	-	1'-0"	1'-0"	2'-9"	4'-10"	-	-	-	-	-
		16'	1'-0"	1'-0"	2'-1"	4'-1"	6'-6"	7'-4"	-	-	-	1'-0"	2'-4"	4'-4"	6'-5"	-	-	-	-	-
		18'	1'-0"	1'-5"	3'-3"	5'-6"	7'-9"	8'-8"	-	-	-	1'-9"	3'-6"	5'-10"	8'-1"	-	-	-	-	-
		20'	1'-0"	2'-7"	4'-7"	6'-7"	9'-1"	-	-	-	-	2'-11"	4'-11"	7'-0"	9'-6"	-	-	-	-	-
	LPI 36A 56A	22'	1'-8"	3'-4"	5'-7"	7'-10"	10'-7"	-	-	-	-	4'-4"	6'-7"	8'-9"	11'-0"	-	-	-	-	-
		24'	2'-5"	4'-10"	6'-8"	9'-1"	-	-	-	-	-	5'-11"	7'-9"	10'-2"	-	-	-	-	-	-
		26'	4'-0"	5'-11"	7'-11"	10'-6"	-	-	-	-	-	7'-9"	9'-9"	11'-8"	-	-	-	-	-	-
		28'	5'-0"	7'-1"	9'-2"	12'-0"	-	-	-	-	-	9'-1"	11'-2"	13'-4"	-	-	-	-	-	-
		30'	6'-1"	8'-4"	10'-7"	13'-7"	-	-	-	-	-	10'-6"	12'-9"	15'-0"	-	-	-	-	-	-

Table 10. Rectangular Web Hole Chart for LPI Joists: 40 psf Live Load, 25 psf Dead Load, up to 24" OC (Cont'd)

Joist Depth (in.)	Joist Series	Clear Span	Rectangular Holes																
			Distance from End Suport								Distance from Interior Support or Cantilever-End Support								
			Maximum Hole Dimension: Depth or Width								Maximum Hole Dimension: Depth or Width								
			2"	4"	6"	8"	10"	12"	14"	16"	18"	2"	4"	6"	8"	10"	12"	14"	16"	18"
16	LPI 30A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	4'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	4'-11"	5'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-6"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-2"	3'-11"	6'-5"	-	-	-	1'-0"	1'-0"	2'-5"	4'-2"	5'-11"	-	-	-	-
		16'	1'-0"	1'-0"	1'-8"	3'-3"	5'-3"	7'-9"	-	-	-	1'-0"	1'-11"	3'-7"	5'-7"	7'-7"	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-7"	6'-10"	-	-	-	-	1'-9"	3'-6"	4'-11"	7'-2"	-	-	-	-	-
		20'	1'-0"	2'-1"	3'-7"	5'-7"	8'-1"	-	-	-	-	2'-11"	4'-11"	6'-6"	8'-6"	-	-	-	-	-
		22'	1'-8"	3'-4"	5'-0"	7'-3"	9'-5"	-	-	-	-	4'-4"	6'-0"	8'-3"	10'-5"	-	-	-	-	-
		24'	2'-5"	4'-3"	6'-1"	8'-6"	10'-11"	-	-	-	-	5'-11"	7'-9"	9'-7"	12'-0"	-	-	-	-	-
		26'	4'-0"	5'-3"	7'-3"	9'-10"	12'-6"	-	-	-	-	7'-1"	9'-1"	11'-0"	-	-	-	-	-	-
		28'	5'-0"	7'-1"	8'-6"	11'-4"	13'-5"	-	-	-	-	9'-1"	10'-6"	12'-7"	-	-	-	-	-	-
		30'	6'-1"	8'-4"	9'-10"	12'-1"	-	-	-	-	-	10'-6"	12'-0"	14'-3"	-	-	-	-	-	-
	LPI 36A 56A	8'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-5"	-	-	-
		10'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-7"	4'-4"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-0"	-	-	-	-
		12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	4'-11"	5'-10"	-	-	1'-0"	1'-0"	1'-6"	2'-8"	4'-6"	-	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-2"	3'-11"	6'-5"	-	-	-	1'-0"	1'-0"	2'-5"	4'-2"	5'-11"	-	-	-	-
		16'	1'-0"	1'-0"	1'-8"	3'-3"	5'-3"	7'-9"	-	-	-	1'-0"	1'-11"	3'-7"	5'-7"	7'-7"	-	-	-	-
		18'	1'-0"	1'-0"	2'-9"	4'-7"	6'-10"	-	-	-	-	1'-9"	3'-6"	4'-11"	7'-2"	-	-	-	-	-
		20'	1'-0"	2'-1"	3'-7"	5'-7"	8'-1"	-	-	-	-	2'-11"	4'-11"	6'-6"	8'-6"	-	-	-	-	-
		22'	1'-8"	3'-4"	5'-0"	7'-3"	9'-5"	-	-	-	-	4'-4"	6'-0"	8'-3"	10'-5"	-	-	-	-	-
		24'	2'-5"	4'-3"	6'-1"	8'-6"	10'-11"	-	-	-	-	5'-11"	7'-9"	9'-7"	12'-0"	-	-	-	-	-
		26'	4'-0"	5'-3"	7'-3"	9'-10"	12'-6"	-	-	-	-	7'-1"	9'-1"	11'-0"	-	-	-	-	-	-
		28'	5'-0"	7'-1"	8'-6"	11'-4"	13'-5"	-	-	-	-	9'-1"	10'-6"	12'-7"	-	-	-	-	-	-
		30'	6'-1"	8'-4"	9'-10"	12'-1"	-	-	-	-	-	10'-6"	12'-0"	14'-3"	-	-	-	-	-	-
18	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-3"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-11"	-	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	6'-9"	-	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	5'-3"	-	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-6"	-	-	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	6'-10"	-	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-9"	6'-0"	-	-	-	1'-0"	1'-0"	1'-6"	2'-8"	5'-4"	8'-7"	-	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	4'-1"	7'-1"	-	-	-	1'-0"	1'-0"	1'-11"	4'-5"	7'-0"	10'-0"	-	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-10"	5'-7"	8'-4"	-	-	-	1'-0"	1'-0"	3'-3"	5'-5"	8'-10"	-	-	-	-
		24'	1'-0"	1'-0"	1'-6"	3'-8"	6'-8"	9'-9"	-	-	-	1'-0"	2'-4"	4'-9"	7'-2"	10'-2"	-	-	-	-
		26'	1'-0"	1'-0"	2'-8"	4'-8"	7'-11"	11'-2"	-	-	-	1'-2"	3'-2"	5'-10"	8'-5"	11'-8"	-	-	-	-
		28'	1'-0"	1'-0"	3'-7"	6'-5"	9'-3"	12'-9"	-	-	-	2'-0"	4'-10"	7'-8"	10'-6"	13'-4"	-	-	-	-
		30'	1'-0"	2'-4"	4'-7"	7'-7"	10'-7"	14'-5"	-	-	-	3'-8"	5'-11"	9'-0"	12'-0"	15'-0"	-	-	-	-
		32'	1'-0"	3'-3"	5'-8"	8'-11"	12'-1"	15'-4"	-	-	-	4'-9"	7'-2"	10'-5"	13'-7"	-	-	-	-	-
		34'	1'-9"	4'-4"	6'-11"	10'-4"	12'-10"	-	-	-	-	6'-9"	9'-4"	11'-11"	15'-4"	-	-	-	-	-
20	LPI 36A 56A	12'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	3'-8"	4'-11"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-5"	-	-
		14'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	5'-0"	6'-1"	-	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-2"	7'-0"	-	-
		16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	6'-6"	7'-9"	-	1'-0"	1'-0"	1'-6"	2'-0"	3'-2"	5'-7"	-	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-7"	7'-9"	-	-	1'-0"	1'-0"	1'-6"	2'-2"	4'-5"	7'-2"	-	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	6'-1"	9'-2"	-	-	1'-0"	1'-0"	1'-6"	3'-5"	6'-0"	9'-0"	-	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-3"	4'-6"	7'-3"	10'-7"	-	-	1'-0"	1'-0"	2'-8"	4'-11"	7'-8"	10'-6"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	3'-1"	5'-6"	8'-6"	-	-	-	1'-0"	1'-9"	4'-2"	6'-7"	9'-0"	12'-0"	-	-	-
		26'	1'-0"	1'-0"	2'-0"	4'-0"	6'-7"	9'-10"	-	-	-	1'-0"	3'-2"	5'-2"	7'-9"	10'-5"	-	-	-	-
		28'	1'-0"	1'-0"	2'-10"	5'-8"	7'-10"	11'-4"	-	-	-	2'-0"	4'-2"	7'-0"	9'-1"	12'-7"	-	-	-	-
		30'	1'-0"	1'-7"	3'-10"	6'-10"	9'-1"	12'-11"	-	-	-	3'-8"	5'-11"	8'-3"	11'-3"	14'-3"	-	-	-	-
		32'	1'-0"	3'-3"	4'-10"	8'-1"	10'-6"	13'-9"	-	-	-	4'-9"	7'-2"	9'-7"	12'-10"	15'-3"	-	-	-	-
		34'	1'-9"	4'-4"	6'-0"	9'-5"	12'-0"	15'-5"	-	-	-	5'-11"	8'-5"	11'-0"	14'-5"	17'-0"	-	-	-	-
22	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-11"	6'-1"	7'-9"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-9"	7'-7"	-	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-8"	6'-5"	7'-9"	-	1'-0"	1'-0"	1'-6"	2'-0"	4'-0"	6'-3"	9'-0"	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-7"	5'-1"	7'-7"	9'-2"	-	1'-0"	1'-0"	1'-6"	2'-11"	5'-6"	8'-0"	-	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	3'-11"	6'-2"	8'-11"	10'-7"	-	1'-0"	1'-0"	2'-1"	4'-4"	6'-7"	9'-4"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-6"	4'-11"	7'-4"	10'-4"	-	-	1'-0"	1'-9"	3'-6"	6'-0"	8'-5"	10'-10"	-	-	-
		26'	1'-0"	1'-0"	1'-6"	4'-0"	5'-11"	8'-7"	11'-10"	-	-	1'-0"	2'-6"	5'-2"	7'-1"	9'-9"	13'-0"	-	-	-
		28'	1'-0"	1'-0"	2'-10"	5'-0"	7'-1"	9'-11"	13'-5"	-	-	2'-0"	4'-2"	6'-3"	9'-1"	11'-2"	-	-	-	-
		30'	1'-0"	1'-7"	3'-10"	6'-1"	8'-4"	11'-4"	14'-5"	-	-	3'-8"	5'-2"	7'-5"	10'-6"	12'-9"	-	-	-	-
		32'	1'-0"	2'-5"	4'-10"	7'-3"	9'-8"	12'-11"	-	-	-	4'-9"	7'-2"	9'-7"	12'-0"	14'-5"	-	-	-	-
		34'	1'-9"	3'-6"	6'-0"	8'-7"	11'-2"	14'-7"	-	-	-	5'-11"	8'-5"	11'-0"	13'-7"	16'-2"	-	-	-	-
		36'	2'-9"	4'-7"	7'-3"	10'-0"	12'-9"	15'-5"	-	-	-	7'-2"	9'-10"	12'-7"	15'-4"	18'-0"	-	-	-	-
		38'	3'-10"	5'-9"	8'-8"	10'-7"	13'-5"	17'-3"	-	-	-	8'-6"	11'-4"	14'-3"	16'-2"	-	-	-	-	-
24	LPI 36A 56A	16'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-0"	4'-1"	5'-4"	6'-6"	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-11"	6'-5"	7'-7"	-
		18'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	3'-3"	5'-6"	6'-5"	7'-9"	1'-0"	1'-0"	1'-6"	2'-0"	3'-1"	5'-4"	8'-1"	-	-
		20'	1'-0"	1'-0"	1'-6"	2'-0"	2'-6"	4'-1"	6'-7"	8'-1"	9'-2"	1'-0"	1'-0"	1'-6"	2'-0"	3'-8"	7'-0"	9'-6"	-	-
		22'	1'-0"	1'-0"	1'-6"	2'-0"	3'-4"	5'-7"	7'-10"	9'-6"	10'-7"	1'-0"	1'-0"	2'-1"	3'-11"	6'-3"	8'-10"	-	-	-
		24'	1'-0"	1'-0"	1'-6"	2'-0"	4'-3"	6'-8"	9'-1"	10'-11"	-	1'-0"	1'-0"	2'-7"	4'-7"	7'-1"	10'-2"	-	-	-
		26'	1'-0"	1'-0"	1'-6"	3'-4"	5'-3"	7'-11"	10'-6"	11'-10"	-	1'-0"	2'-6"	4'-6"	6'-11"	9'-7"	11'-8"	-	-	-
		28'	1'-0"	1'-0"	2'-2"	4'-3"	6'-5"	9'-3"	12'-0"	13'-5"	-	2'-0"	4'-2"	6'-4"	9'-4"	12'-4"	14'-4"	-	-	-
		30'	1'-0"	1'-7"	3'-1"	5'-4"	7'-7"	10'-7"	13'-8"	-	-	2'-11"	5'-2"	7'-6"	10'-4"	13'-2"	15'-0"	-	-	-
		32'	1'-0"	2'-5"	4'-10"	6'-6"	8'-11"	12'-1"	15'-4"	-	-	4'-9"	6'-4"	8'-9"	12'-1"	13'-7"	-	-	-	-
		34'	1'-9"	3'-6"	6'-0"	7'-9"	10'-4"	12'-10"	16'-3"	-	-	5'-11"	8'-5"	10'-10"	13'-9"	15'-[illegible]	-	-	-	-
		36'	2'-9"	4'-7"	6'-5"	9'-1"	11'-10"	14'-6"	-	-	-	7'-2"	9'-10"	12'-8"	14'-5"	17'-[illegible]	-	-	-	-
		38'	3'-10"	5'-9"	7'-8"	10'-7"	13'-5"	16'-3"	-	-	-	8'-6"	11'-4"	14'-3"	16'-2"	19'-[illegible]	-	-	-	-

Figure 3. Web Hole Drawing for TLI Joists

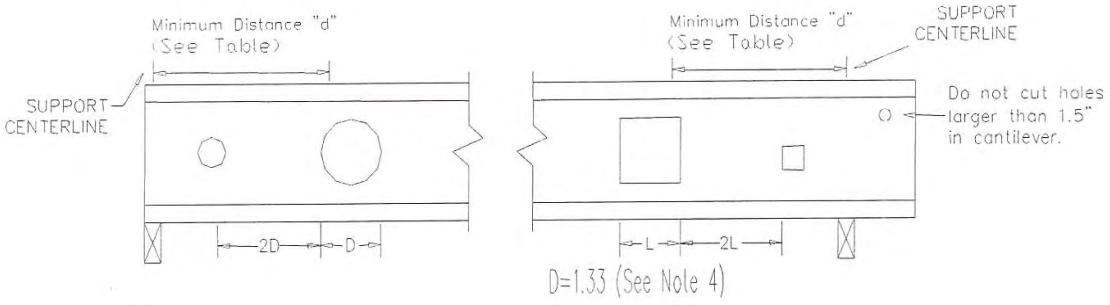


Table 11. Web Hole Chart for TLI 15, 25, 35, and CTR Joists

JOIST DEPTH (in)	CIRCULAR HOLE DIAMETER "D" (in)								
	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7	Col. 8	Col. 9
9.5	--	2	--	3	--	4	--	5	6
11.875	--	2	3	--	4	5	6	--	8
14	2	3	4	5	6	7	8	9	10
16	2	3	5	6	7	9	10	11	--
SPAN (ft)	**MINIMUM DISTANCE "d" FROM SUPPORT CENTERLINE (ft-in)**								
10	1-0	1-3	1-3	1-9	1-9	2-3	2-6	2-9	3-3
12	1-0	1-3	1-6	2-0	2-0	2-9	3-0	3-6	4-0
14	1-0	1-3	1-9	2-3	2-6	3-0	3-6	4-0	4-9
16	1-0	1-6	2-0	2-6	2-9	3-6	4-0	4-6	5-3
18	1-3	1-8	2-3	2-9	3-0	4-0	4-6	5-0	6-0
20	1-3	2-0	2-6	3-3	3-6	4-6	5-0	5-6	6-6
22	1-6	2-3	2-9	3-6	3-9	4-9	5-6	6-0	7-3
24	1-6	2-6	3-0	3-9	4-0	5-3	6-0	6-9	8-0
26	1-9	2-9	3-3	4-0	4-6	5-9	6-6	[illegible]	8-6
28	1-9	3-0	3-5	4-3	4-9	6-0	[illegible]	[illegible]	9-3
30	2-0	3-3	3-9	4-9	5-0	6-5	[illegible]	[illegible]	9-9

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

NOTES:

1. **DO NOT CUT OR DAMAGE FLANGES.**
2. A 1.5" hole may be cut anywhere in the web.
3. The uncut distance between holes shall be at least twice the diameter of the largest hole or twice the longest side of a rectangular hole.
4. For square or rectangular holes, the longest side "L" is multiplied by 1.33 to obtain the value as "D" in the table.
5. Table is for simple or multiple span conditions with uniform loads.
6. To determine minimum distance "d" from center line of support to centerline of hole:

   a. Select appropriate column for desired joist depth and size.
   b. Follow column down to the intersection of the appropriate span, the value in this cell is "d".

   Example 1: To cut a 4" circular hole in a 11.875" deep joist with a 16 foot span:
   1. Select Column 5.
   2. Follow column down to 16 foot span.
   3. Centerline of hole shall be 2'-9" from centerline of support.

   Example 2: To cut a 3" square hole in a 11.875" deep joist with a 16 foot span:
   1. 3" x 1.33 = 3.99", use 4".
   2. Select Column 5.
   3. Follow column down to 16 foot span.
   4. Center line of hole shall be 2'-9" from center line of support.

Table 12. Maximum Rectangular Hole Length for TLI 16 and 21 Joists

JOIST SERIES	JOIST DEPTH (in.)	PERCENTAGE WEB DEPTH REMOVED			
		25%	50%	75%	100%
TLI 16	9.5	24	24	21.5	17.75
	11.25	24	24	22.25	18.5
	11.875	24	24	22.5	18.75
	14	24	24	23.25	19.375
	16	24	24	23.375	19.75
TLI 21	9.5	24	24	21.5	17.75
	11.25	24	24	22.875	19.1
	11.875	24	24	23.125	19.5
	14	24	24	24	2
	16	24	24	24	2

Table 13. Maximum Allowable Round Hole Diameter for TLI 16 and 21 Joists

JOIST SERIES	JOIST DEPTH (in.)				
	9.5	11.25	11.875	14	16
	MINIMUM ALLOWABLE ROUND HOLE DIAMETER (in.)				
TLI 16	6.5	8.25	8.875	11	13
TLI 21	6.5	8.25	8.875	11	

Table 14. Web Hole Equations for TLI 16 and 21 Joists

HOLE TYPE	FORMULA
RECTANGULAR	Y = 0.389 + (0.002 x X1) + (0.198 x X2) + (0.0
ROUND	Y = -0.293 + (0.0178 x X1) + (0.715 x X2)

Where:

Y = Factor noting decrease in shear strength.
X1 = Joist Depth (Inches).
X2 = Percentage Web Depth Removed (Decimal Fraction).
X3 = Hole Length (Inches).

When using the formulas in Table 14, the hole is too large if the resulting shear capacity of the I-joist is less than 200 lbs.

Example using formulas in Table 14:

Given: I-joist is Series 16, 9.5", Hole length = 18 inches, Hole depth is equal to 50% of I-joist depth, Shear capacity of joist without hole = 1225 lbs. Find the shear capacity of this joist:

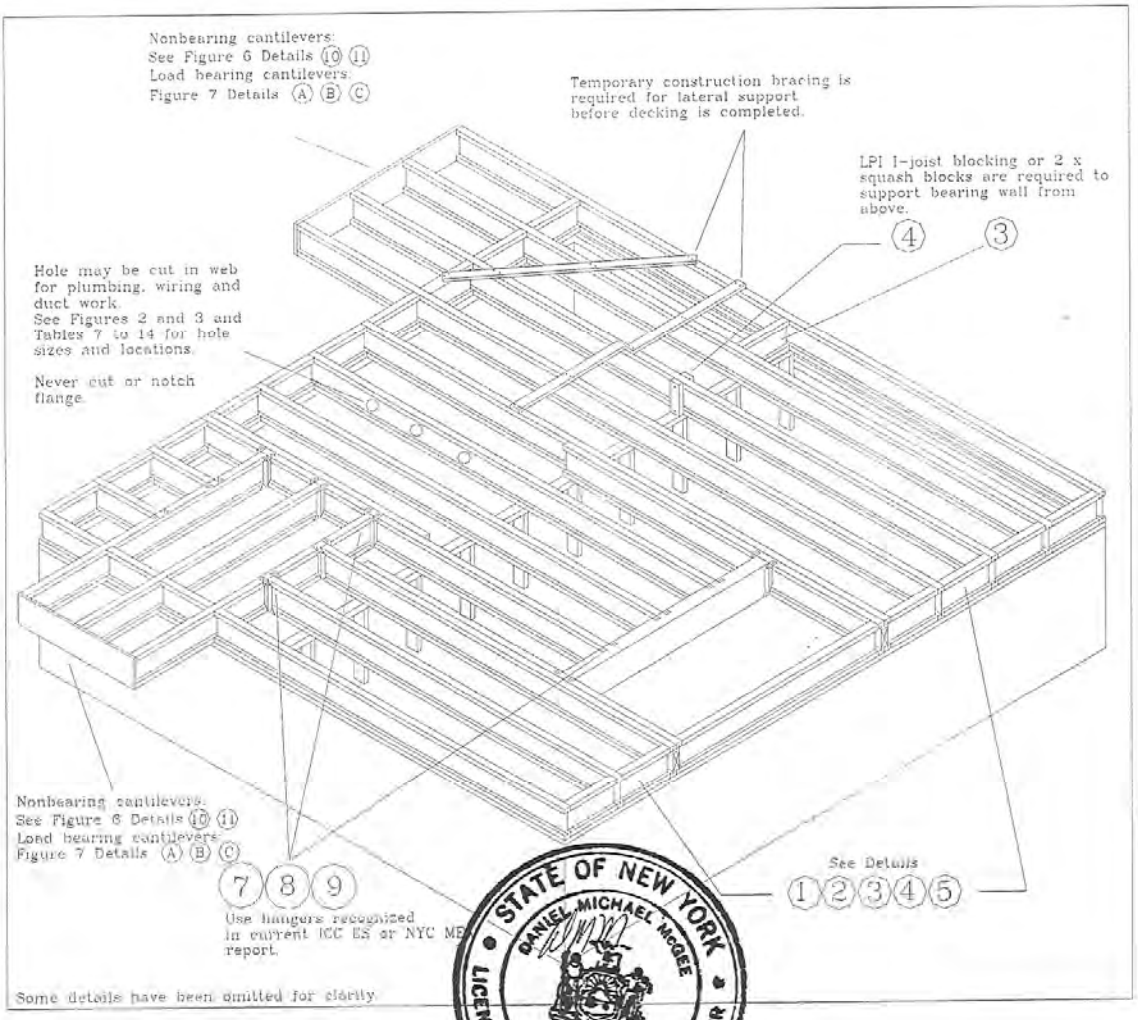
$$Y = 0.389 + (0.002 \times 9.5) + (0.198 \times 0.5) + (0.013 \times 18)$$
$$Y = 0.741 \text{ decrease in shear capacity}$$

Shear capacity with hole = (1 – 0.741) x 1225 = 317 lbs. Place in a location in span where the shear level does not exceed 317 lbs.

NOTES FOR TABLES 12 TO 14:

1. Holes must be centered within the depth of the joists.
2. The maximum length for any rectangular hole shall not exceed 24".
3. 100% depth removed assumes that the hole is centered in the depth of the joist, and at least ¼" of web is left on both the top and bottom of the hole.
4. Distance from center bearing to rectangular hole edge adjacent to support shall be no less than 18 inches (457 mm). Distance from center bearing to center of circular hole shall be no less than 12" (305 mm).
5. Spacing between holes shall be not less than twice the diameter of the larger circular hole, or twice the length of the larger rectangular hole.

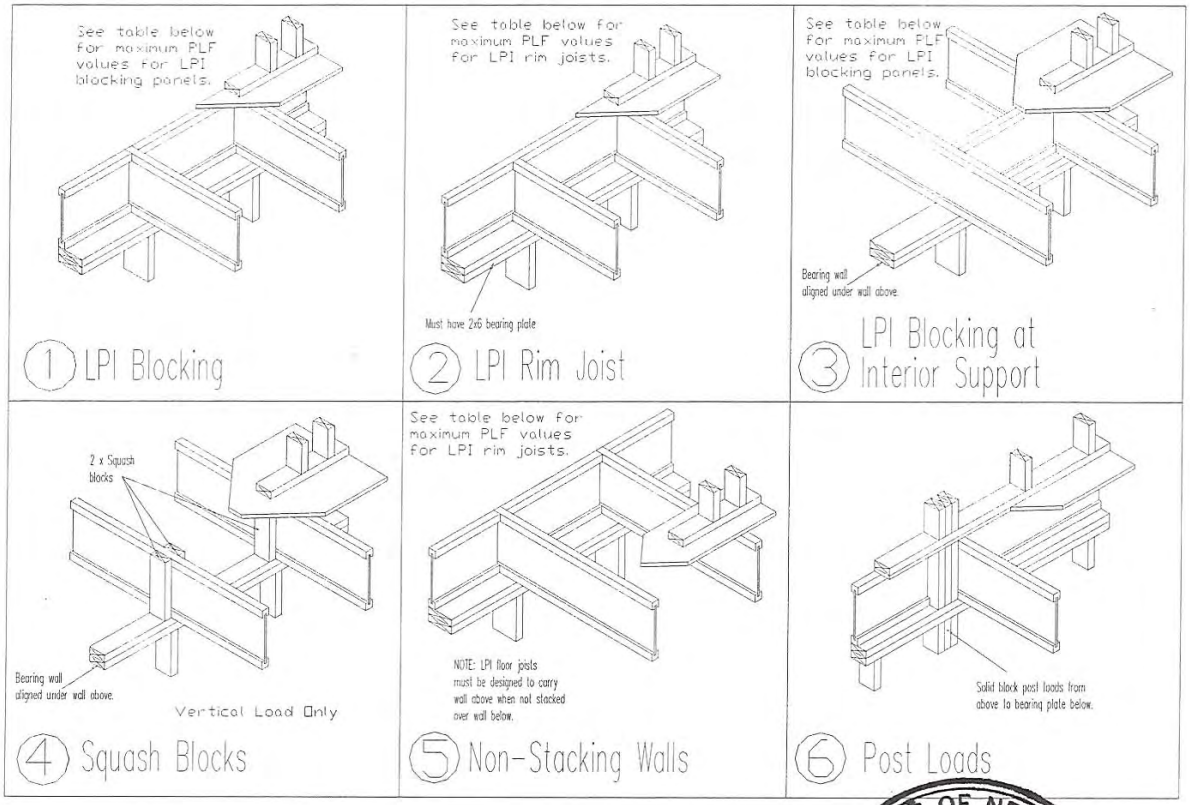
Figure 4. Typical I-Joist Floor Layout



NOTES:

1. These instructions are offered as a guide to good practice in the handling, storage and installation of LPI joists. They are, however, solely general recommendations, and, in some instances, other or additional precautions may be desirable. In all cases, the procedures used shall be as specified by the architect/engineer responsible for the entire building and approved by the building official.
2. Failure to follow good procedures for handling, storage and installation could result in unsatisfactory performance, unsafe structures and possible collapse.
3. All rim joists, blocking, connections and temporary bracing must be installed before erectors are allowed on the structure.
4. No loads other than the weight of the erectors are to be imposed on the structure before it is permanently sheathed.
5. After sheathing, do not overload joists with construction materials exceeding design loads.
6. **TEMPORARY BRACING:** Use lines of 1-by-4's nailed at each LPI joist with two 8d nails. Keep them parallel and approximately 8 feet-0 inches apart. Use long pieces, not short blocks. Lap the ends (side by side) to keep the line continuous. To prevent endwise intervals between ends. The continuous 1-by-4 bracing shall be attached to the braced bay.
7. Numbered details are noted in Figures 5 and 6.
8. For **SI:** 1 inch = 25.4 mm, 1 foot = 304.8 mm.

Figure 5. I-Joist Floor Framing Details



NOTES:

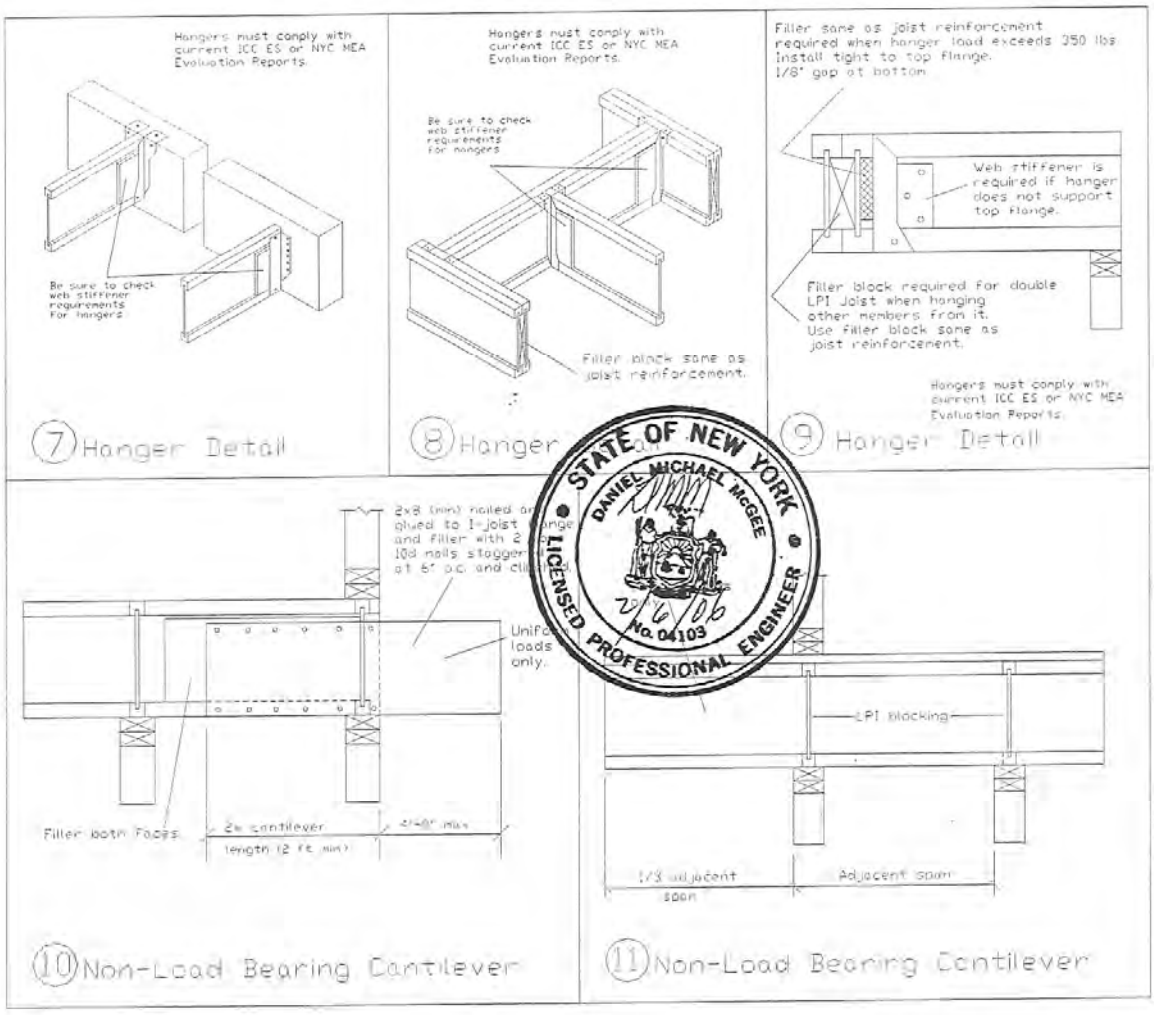
1. Minimum bearing is required at joist ends, as specified in Tables 1 and 4. Minimum 3 ½ inches bearing is required for support.
2. Top and bottom flanges must be laterally restrained at all supports.
3. Lateral support should be considered for bottom flange where there is no sheathing on underside.
4. *All* installation details apply to LPI Series joists.
5. Squash block-bearing capacity designed by a professional engineer.
6. These details apply to gravity loads. Applicability to lateral force resistance is beyond the scope of this report.
7. For **SI** Units: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.6 N/m.

Table 15. LPI Rim Joist or Blocking Panel Allowable Capacities

Joist Depth (in.)	LPI Joist Series							
	100-150	200-250	300-350	550	26/26A	30/30A	36/36A	56A
9.500	1800 plf	1800 plf	1800 plf	-	1800 plf	1800 plf	-	-
11.875	1800 plf	1800 plf	1800 plf	2400 plf	1800 plf	1800 plf	1800 plf	2400 plf
14.000	-	1800 plf	1800 plf	2200 plf	-	1800 plf	1800 plf	2200 plf
16.000	-	1800 plf	1800 plf	1900 plf	-	1800 plf	1800 plf	1900 plf
18.000	-	-	-	-	-	-	1300 plf	1700 plf
20.000	-	-	-	-	-	-	1300 plf	1580 plf
22.000	-	-	-	-	-	-	1300 plf	1300 plf
24.000	-	-	-	-	-	-	1100 plf	1100 plf

For **SI** Units: 1 inch = 25.4 mm, 1 plf = 14.6 N/m.

Figure 6. I-Joist Floor Framing Details (Cont'd)



NOTES:

1. Live load applied to cantilever should not be greater than three times the dead load applied to the adjacent span.
2. LPI Joists may be cantilevered up to one third of the adjacent span if they do not support concentrated loads on the cantilever.
3. For SI Units: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.45 N.

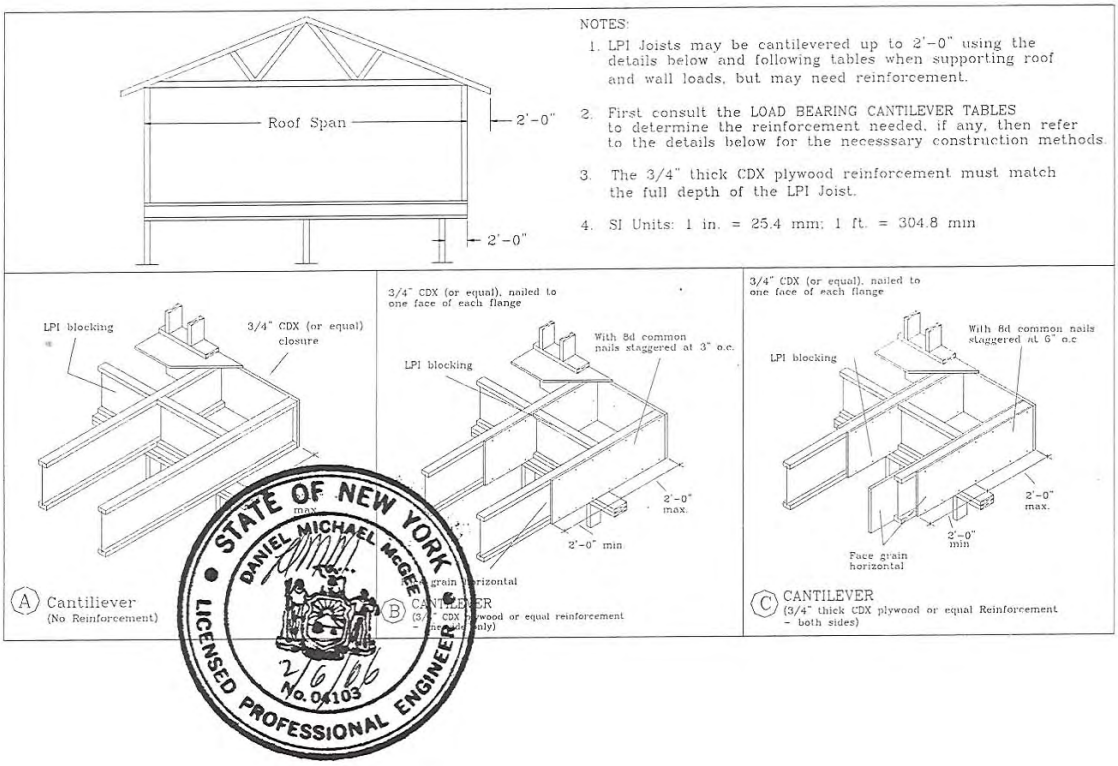
FILLER BLOCKS:

Use 1/2-inch and 5/8-inch OSB (or equal) with LPI 100, 125, 150 and 26 Series Joists, 2-by-6 lumber (minimum SPF) with LPI 200, 225, 250 and 30 Series Joists, and 2-by-8 lumber (minimum SPF) + 1/2-inch OSB (or equal) with LPI 300, 325, 350 and 36 Series Joists. Attach with two rows of 8d nails staggered at 6 inches on center from each side. Use two 2-by-8's (minimum SPF) with LPI 550 and 56A Series Joists. Attach with two rows of 10d nails staggered at 6 inches on center from each side.

FILLERS:

Use 1/2-inch or 5/8-inch OSB (or equal) with LPI 100, 125, 150 and 26 Series Joists, 3/4-inch OSB (or equal) with LPI 200, 225, 250 and 30 Series Joists, and 2 pieces of 1/2-inch OSB (or equal) with LPI 300, 325, 350 and 36 Series Joists. Attach with two rows of 8d nails staggered at 6 inches on center from each side. Use 2-by-8's (minimum SPF) with LPI 550 and 56A Series Joists. Attach with two rows of 10d nails staggered at 6 inches on center from each side.

Figure 7. I-Joist Load-Bearing Cantilever Details



Final Acceptance October 16, 2006

Examined by