CAN (LSD) TECHNICAL GUIDE

TECH GUIDE

| MIDRISE
| MULTIFAMILY

PWT I-JOIST

COMMERCIAL
LIGHT-FRAME
CONSTRUCTION

PWT FOCUSED ON EWP

PWT™
I-JOIST

FOCUSED ON EWP

PWT™ I-Joists are straighter and more uniform in strength, stiffness and size than traditional lumber, providing a strong, sturdy floor. We offer longer lengths so that ceilings and floors can be designed with fewer pieces, saving time on installation. Other advantages over lumber include lower moisture content, which makes our I-Joists less likely to split, shrink, twist, warp or bow. This means reduced callbacks due to fewer pops and squeaks.

Strength in Numbers

The full range of PWT products are designed and manufactured to install easily and work together to provide a strong, sound structure.

For I-Joists, we combine laminated veneer lumber (LVL) or finger-jointed sawn lumber flanges with a web of oriented strand board (OSB) to produce an I-shaped structural member. The webs allow plumbing and wiring to pass through without extra framing, while the flanges resist bending – ideal for long spans in floors, ceilings and roofs.

PWT I-Joists are a building material with built-in environmental benefits

- Made of engineered wood substrate, a renewable resource with a reduced environmental impact
- Raw material procurement targets small, fast growing trees
- Only low-emitting, safe resins are used as a binder
- Available in longer lengths, reducing the number of pieces needed; this results in more efficient utilization of resources
- Can help you qualify for certification points in a number of leading green building programs

Peace-of-Mind for a Lifetime

If your PWT I-Joists ever develop performance problems due a manufacturing deflect, PWT will cover all reasonable repair and/or replacement costs per the conditions of our Lifetime Limited Warranty. Visit pwtewp.com to view our complete warranty, or contact your local PWT distributor or sales office for an original copy.

Compliant with Major Building Codes

PWT I-Joists have been evaluated by CCMC for compliance with the National Building Code of Canada. Contact your local PWT distributor or visit pwtewp.com for the most current code reports.

Lifetime Limited Warranty

Products are backed by a lifetime limited warranty. Visit pwtewp.com or call (800) 515-7570 for a copy of the warranty.

I-Joists

PWI 20S, LPI 20Plus
Width: 2-1/2"
Depths: 9-1/2", 11-7/8", 14", 16"
Web Thickness: 3/8"
Flange Material: Solid Sawn
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

PWI 32S, LPI 32Plus
Width: 2-1/2"
Depths: 9-1/2", 11-7/8", 14", 16"
Web Thickness: 3/8"
Flange Material: Solid Sawn
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

PWI 42S, LPI 42Plus
Width: 3-1/2"
Depths: 9-1/2", 11-7/8", 14", 16", 18", 20", 24"
Web Thickness: 3/8" or 7/16"
Flange Material: Solid Sawn
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

PWI 52S, LPI 52Plus
Width: 3-1/2"
Depths: 11-7/8", 14", 16"
Web Thickness: 7/16"
Flange Material: Solid Sawn
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

PWI 36L, LPI 36
Width: 2-1/4"
Depths: 11-7/8", 14", 16", 18"
Web Thickness: 3/8"
Flange Material: LVL
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

PWI 56L, LPI 56
Width: 3-1/2"
Depths: 11-7/8", 14", 16", 18", 24"
Web Thickness: 7/16"
Flange Material: LVL
Flange Depth: 1-1/2"
Lengths: Up to 64' in 2' increments

Please verify availability with the PWT distributor in your area prior to specifying these products.

Code Evaluation Reports:
CCMC evaluation reports can be obtained at www.nrc-cnrc.gc.ca.

CCMC 12412-R, APA PR-L238C
or visit pwtewp.com

Product Specifications & Design Values

LIMIT STATES DESIGN VALUES

Series	Depth	Weight (plf)	Factored Moment (lb-ft)	EI x 10^6 (lb-in²)	K x 10^6 (lb-ft/in)	Factored Shear (lbs)
PWI 20S, LPI 20Plus	9-1/2"	2.6	4670	185	0.358	1990
	11-7/8"	2.9	6250	318	0.438	2345
	14"	3.1	7320	474	0.512	2650
	16"	3.3	8400	652	0.582	2950
PWI 32S, LPI 32Plus	9-1/2"	2.6	5570	221	0.358	1990
	11-7/8"	2.9	7210	375	0.438	2345
	14"	3.1	8680	549	0.512	2650
	16"	3.3	10065	743	0.582	2950
PWI 36L, LPI 36	11-7/8"	3.1	10715	429	0.468	2550
	14"	3.4	12900	622	0.550	2890
	16"	3.6	14960	836	0.625	3190
	18"	3.9	16860	1082	0.700	3450
PWI 42S, LPI 42Plus	9-1/2"	3.4	8940	321	0.412	2115
	11-7/8"	3.5	11585	547	0.515	2565
	14"	3.8	13950	802	0.607	2960
	16"	4.0	16180	1092	0.693	3340
	18"	4.4	18290	1333	0.960	4035
	20"	4.6	20245	1688	1.067	4410
	24"	5.5	24080	2534	1.280	5160
PWI 52S, LPI 52Plus	11-7/8"	4.5	14085	600	0.633	3245
	14"	4.8	16960	874	0.747	3680
	16"	5.0	19670	1183	0.853	4080
PWI 56L, LPI 56	11-7/8"	4.5	16920	668	0.549	3245
	14"	4.8	20370	968	0.641	3680
	16"	5.0	23625	1301	0.729	4080
	18"	5.3	26630	1684	0.817	4490
	24"	6.0	35490	3127	1.081	5715

Notes:

1. PWT I-Joists shall be designed for dry-use conditions only. Dry-use applies to products installed in dry, covered and well ventilated interior conditions in which the average equilibrium moisture content (MC) of lumber is 15% or less over a year and does not exceed 19% at any time.
2. Moment and Shear are the factored resistances for standard load duration and shall be adjusted according to code.
3. Moment resistance shall not be increased for repetitive member use.
4. Deflection calculations shall include both bending and shear deformations.

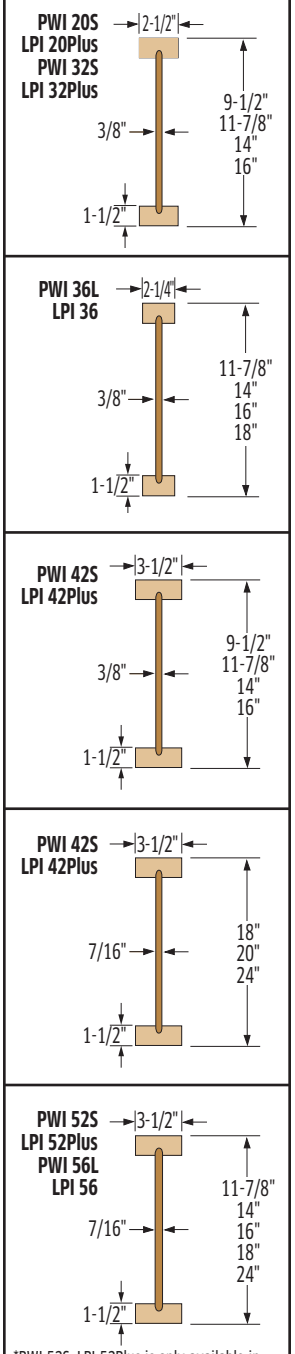
   Deflection for a simple span, uniform load:

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

   Where: Δ = deflection (in)
   w = uniform load (plf)
   L = design span (ft)
   EI = bending stiffness (from table)
   K = shear stiffness (from table)

   Equations for other conditions can be found in engineering references.

PROFILE DETAILS



*PWI 52S, LPI 52Plus is only available in 11-7/8," 14" & 16" depths

FACTORED REACTION AND BEARING RESISTANCE

Series	Depth	End Reaction Resistance[1] (lbs)					Interior Reaction Resistance[1] (lbs)				Flange Bearing Resistance, Ø F_{cp} (lb/in)
		Minimum Bearing			Maximum Bearing (4")		Minimum Bearing (3½")		Maximum Bearing (5½")		
		Without Stiffeners	With Stiffeners	Bearing Length	Without Stiffeners	With Stiffeners	Without Stiffeners	With Stiffeners	Without Stiffeners	With Stiffeners	
PWI 20S, LPI 20Plus	9-1/2"	1530	1800	1-1/2"	1750	1990	3465	3750	3865	4160	1380
	11-7/8"	1530	2010	1-1/2"	1830	2345	3680	3985	4095	4465	
	14"	1530	2200	1-1/2"	1895	2650	3875	4205	4300	4745	
	16"	1530	2385	1-1/2"	1955	2950	4055	4410	4500	5010	
PWI 32S, LPI 32Plus	9-1/2"	1530	1800	1-1/2"	1750	1990	3465	3750	3865	4160	1695
	11-7/8"	1530	2010	1-1/2"	1830	2345	3680	3985	4095	4465	
	14"	1530	2200	1-1/2"	1895	2650	3875	4205	4300	4745	
	16"	1530	2385	1-1/2"	1955	2950	4055	4410	4500	5010	
PWI 36L, LPI 36	11-7/8"	1620	2370	1-1/2"	2030	2550	3940	4900	4475	5475	1720
	14"	1620	2390	1-1/2"	2090	2890	3940	5060	4475	5625	
	16"	1620	2405	1-1/2"	2145	3190	3940	5215	4475	5770	
	18"	1855	2840	2-1/2"	2200	3450	3940	5375	4475	5920	
PWI 42S, LPI 42Plus	9-1/2"	1870	2115	1-1/2"	2060	2115	4575	4885	4640	5045	2450
	11-7/8"	1965	2385	1-1/2"	2520	2565	4775	5270	4925	5550	
	14"	2050	2620	1-1/2"	2520	2960	4955	5625	5175	6005	
	16"	2130	2840	1-1/2"	2520	3340	5120	5960	5420	6440	
	18"	2370	3640	2-1/2"	2670	4035	5445	6765	6075	7300	
	20"	2370	3865	2-1/2"	2670	4410	5445	6960	6075	7630	
	24"	2370	4270	2-1/2"	2670	5160	5445	7325	6075	8225	
PWI 52S, LPI 52Plus	11-7/8"	2160	2875	1-1/2"	2670	3245	5400	6315	5740	6645	2450
	14"	2185	3110	1-1/2"	2910	3680	5420	6725	5910	7165	
	16"	2210	3330	1-1/2"	3135	4080	5445	7110	6075	7665	
PWI 56L, LPI 56	11-7/8"	1805	2620	1-1/2"	2390	3245	4940	6090	5795	6410	2720
	14"	1805	2770	1-1/2"	2425	3680	4940	6400	5795	6785	
	16"	1805	2910	1-1/2"	2455	4080	4940	6700	5795	7140	
	18"	2075	3630	2-1/2"	2485	4490	4940	7000	5795	7495	
	24"	2115	4370	2-1/2"	2580	5715	4940	7890	5795	8570	

Notes:

1. End and Interior Reaction Resistance shall be limited by the Flange Bearing Resistance or the bearing resistance of the support material, whichever is less.
2. The Flange Bearing Resistance is the specified strength in compression perpendicular-to-grain (f_{cp}) of the I-joist flange multiplied by Ø = 0.8.
3. To account for eased edges when determining the compressive resistance perpendicular-to-grain (Q_r and Q'_r) of the I-joist flange and of the support material, subtract the following from the nominal flange width of the I-joist:
   - subtract 0.25" for the PWI 18S, LPI 18, PWI 20S, LPI 20Plus, PWI 32S, LPI 32Plus, PWI 42S, LPI 42Plus, PWI 52S, LPI 52Plus
   - subtract 0.10" for the PWI 36L, LPI 36, PWI 56L, LPI 56
4. Reaction Resistance, Flange Bearing Resistance and the bearing resistance of any wood support are for standard load duration and shall be reduced according to code for longer loading duration.
5. Reaction Resistance and Flange Bearing Resistance may be increased over that tabulated for the minimum bearing length. Linear interpolation of the Reaction Resistance between the minimum and maximum bearing length is permitted. Bearing lengths longer than the maximum do not further increase Reaction Resistance. Flange Bearing Resistance and that of a wood support will increase with additional bearing length.

Example: Determine the stiffened end reaction capacity for a 14" PWI 32S with 2" of bearing for a non-snow roof load and supported on an SPF wall plate (768 psi).

1. Determine End Reaction (ER) w/ Stiffeners: ER = 2200 + (2650 - 2200) * (2" - 1.5") / (4" - 1.5") = 2290 lbs
2. Determine Flange Bearing Resistance (FBR): FBR = 754 psi * (2.5" - 0.25") * 2" = 3393 lbs
3. Determine wall Plate Bearing Resistance (PBR): PBR = 0.8 * 768 psi * (2.5" - 0.25") * 2" = 2764 lbs
4. Final End Reaction Resistance w/ Stiffeners = 2290 lbs

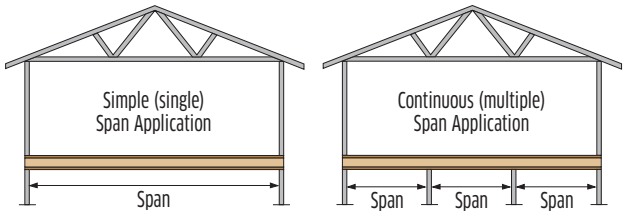
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 40 psf Live Load, 25 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



40 PSF LIVE LOAD, 25 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-4"	15'-4"	14'-10"	14'-2"	16'-10"	15'-11"	15'-4"	14'-1"	16'-9"	15'-9"	15'-3"	14'-2"	17'-4"	16'-4"	15'-9"	14'-1"
	11-7/8"	18'-4"	17'-3"	16'-7"	15'-11"	19'-3"	17'-10"	17'-2"	**16'-4"**	19'-0"	17'-9"	17'-1"	16'-5"	19'-11"	18'-6"	17'-8"	**16'-4"**
	14"	20'-6"	19'-0"	18'-1"	**17'-4"**	21'-5"	19'-10"	18'-11"	**17'-8"**	21'-2"	19'-8"	18'-10"	**17'-9"**	22'-3"	20'-8"	19'-9"	**17'-8"**
	16"	22'-4"	20'-8"	19'-9"	**18'-9"**	23'-5"	21'-8"	20'-8"	**18'-11"**	23'-1"	21'-6"	20'-6"	**19'-0"**	24'-3"	22'-7"	21'-2"	**18'-11"**
PWI 32S, LPI 32Plus	**9-1/2"**	16'-9"	15'-10"	15'-3"	14'-8"	17'-4"	16'-4"	15'-9"	**15'-1"**	17'-2"	16'-2"	15'-7"	15'-0"	17'-9"	16'-9"	16'-2"	**15'-5"**
	11-7/8"	19'-0"	17'-8"	17'-0"	16'-4"	19'-11"	18'-5"	17'-8"	**16'-11"**	19'-7"	18'-2"	17'-6"	**16'-10"**	20'-7"	19'-1"	18'-3"	**17'-3"**
	14"	21'-1"	19'-7"	18'-8"	**17'-9"**	22'-2"	20'-6"	19'-6"	**18'-2"**	21'-9"	20'-3"	19'-4"	**18'-4"**	22'-10"	21'-3"	20'-3"	**18'-2"**
	16"	23'-0"	21'-3"	20'-3"	**19'-3"**	24'-1"	22'-4"	21'-3"	**19'-1"**	23'-8"	22'-0"	21'-0"	**19'-11"**	24'-11"	23'-2"	**22'-1"**	**19'-1"**
PWI 36L, LPI 36	**11-7/8"**	19'-7"	18'-2"	17'-5"	16'-9"	20'-7"	19'-0"	18'-2"	**17'-4"**	20'-2"	18'-9"	17'-10"	17'-2"	21'-2"	19'-8"	18'-9"	**17'-9"**
	14"	21'-9"	20'-1"	19'-2"	**18'-2"**	22'-10"	21'-1"	20'-1"	**19'-1"**	22'-5"	20'-9"	19'-10"	**18'-10"**	23'-6"	21'-10"	20'-10"	**19'-9"**
	16"	23'-7"	21'-10"	20'-10"	**19'-9"**	24'-9"	22'-11"	**21'-10"**	**20'-0"**	24'-4"	22'-7"	21'-6"	**20'-5"**	25'-6"	23'-8"	**22'-7"**	**20'-0"**
	18"	25'-4"	23'-5"	22'-3"	**21'-1"**	26'-8"	24'-8"	**23'-6"**	**20'-0"**	26'-1"	24'-2"	23'-1"	**21'-11"**	27'-6"	25'-6"	**24'-4"**	**20'-0"**
PWI 42S, LPI 42Plus	**9-1/2"**	17'-11"	16'-10"	16'-3"	15'-7"	18'-9"	17'-5"	16'-9"	16'-1"	18'-4"	17'-2"	16'-7"	15'-10"	19'-3"	17'-10"	17'-2"	16'-5"
	11-7/8"	20'-9"	19'-2"	18'-3"	17'-5"	21'-9"	20'-1"	19'-1"	18'-1"	21'-3"	19'-8"	18'-9"	17'-10"	22'-4"	20'-8"	19'-8"	18'-8"
	14"	23'-0"	21'-3"	20'-3"	19'-2"	24'-2"	22'-4"	21'-3"	20'-1"	23'-8"	21'-11"	20'-10"	19'-9"	24'-10"	23'-0"	21'-11"	20'-9"
	16"	25'-1"	23'-2"	22'-1"	20'-11"	26'-4"	24'-4"	23'-2"	21'-11"	25'-9"	23'-10"	22'-9"	21'-6"	27'-1"	25'-1"	23'-10"	**22'-7"**
	18"	26'-8"	24'-8"	23'-6"	22'-3"	28'-2"	26'-0"	24'-9"	23'-5"	27'-5"	25'-5"	24'-3"	22'-11"	28'-11"	26'-9"	25'-6"	**24'-2"**
	20"	28'-6"	26'-4"	25'-1"	23'-9"	30'-1"	27'-9"	26'-5"	**25'-0"**	29'-4"	27'-2"	25'-11"	24'-6"	30'-11"	28'-8"	27'-4"	**25'-10"**
	24"	32'-1"	29'-7"	28'-2"	**26'-7"**	34'-5"	31'-2"	**29'-8"**	**28'-0"**	33'-3"	30'-6"	29'-1"	**27'-6"**	35'-8"	32'-3"	**30'-8"**	**29'-0"**
PWI 52S, LPI 52Plus	**11-7/8"**	21'-3"	19'-8"	18'-9"	17'-10"	22'-4"	20'-7"	19'-8"	18'-7"	21'-9"	20'-2"	19'-3"	18'-3"	22'-10"	21'-2"	20'-2"	19'-1"
	14"	23'-8"	21'-10"	20'-9"	19'-8"	24'-10"	22'-11"	21'-10"	20'-8"	24'-2"	22'-5"	21'-4"	20'-3"	25'-5"	23'-6"	22'-5"	21'-3"
	16"	25'-9"	23'-9"	22'-7"	21'-5"	27'-0"	24'-11"	23'-9"	22'-5"	26'-4"	24'-5"	23'-3"	22'-0"	27'-8"	25'-7"	24'-5"	23'-1"
PWI 56L, LPI 56	**11-7/8"**	21'-9"	20'-1"	19'-1"	18'-1"	22'-10"	21'-0"	20'-0"	18'-11"	22'-3"	20'-6"	19'-7"	18'-6"	23'-4"	21'-7"	20'-6"	19'-5"
	14"	24'-1"	22'-3"	21'-2"	20'-0"	25'-4"	23'-4"	22'-2"	21'-0"	24'-8"	22'-9"	21'-8"	**20'-6"**	25'-11"	23'-11"	22'-9"	**21'-7"**
	16"	26'-2"	24'-2"	22'-11"	**21'-9"**	27'-6"	25'-4"	24'-1"	**22'-10"**	26'-9"	24'-9"	23'-7"	**22'-4"**	28'-2"	26'-0"	24'-9"	**23'-5"**
	18"	28'-1"	25'-10"	24'-7"	**23'-3"**	29'-7"	27'-3"	25'-11"	**24'-6"**	28'-9"	26'-7"	25'-3"	**23'-11"**	30'-3"	28'-0"	26'-8"	**25'-3"**
	24"	34'-0"	30'-10"	**29'-4"**	**27'-8"**	36'-7"	**32'-10"**	**30'-11"**	**29'-2"**	35'-1"	31'-8"	**30'-2"**	**28'-6"**	37'-9"	**34'-1"**	**31'-11"**	**30'-1"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: bare joist L/360 on live load and L/240 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

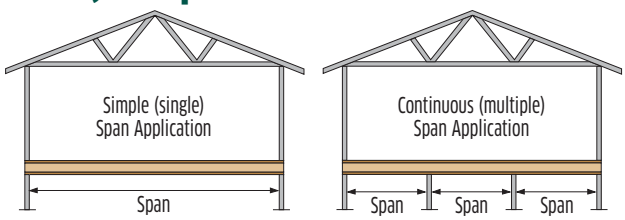
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 40 psf Live Load, 35 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



40 PSF LIVE LOAD, 35 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-4"	15'-4"	14'-10"	13'-3"	16'-10"	15'-11"	14'-9"	**13'-2"**	16'-9"	15'-9"	14'-10"	13'-3"	17'-4"	16'-2"	14'-9"	**13'-2"**
	11-7/8"	18'-4"	17'-3"	16'-7"	**15'-4"**	19'-3"	17'-10"	17'-1"	**15'-1"**	19'-0"	17'-9"	17'-1"	**15'-4"**	19'-11"	18'-6"	17'-1"	**15'-1"**
	14"	20'-6"	19'-0"	18'-1"	**16'-8"**	21'-5"	19'-10"	**18'-6"**	**16'-0"**	21'-2"	19'-8"	**18'-7"**	**16'-8"**	22'-3"	20'-4"	**18'-6"**	**16'-0"**
	16"	22'-4"	20'-8"	**19'-9"**	**17'-10"**	23'-5"	21'-8"	**19'-10"**	**16'-9"**	23'-1"	21'-6"	**19'-11"**	**17'-10"**	24'-3"	21'-9"	**19'-10"**	**16'-9"**
PWI 32S, LPI 32Plus	**9-1/2"**	16'-9"	15'-10"	15'-3"	14'-6"	17'-4"	16'-4"	15'-9"	**14'-3"**	17'-2"	16'-2"	15'-7"	14'-6"	17'-9"	16'-9"	16'-2"	**14'-3"**
	11-7/8"	19'-0"	17'-8"	17'-0"	**16'-4"**	19'-11"	18'-5"	**17'-8"**	**15'-1"**	19'-7"	18'-2"	17'-6"	**16'-6"**	20'-7"	19'-1"	**18'-3"**	**15'-1"**
	14"	21'-1"	19'-7"	**18'-8"**	**17'-9"**	22'-2"	20'-6"	**19'-6"**	**16'-0"**	21'-9"	20'-3"	**19'-4"**	**18'-2"**	22'-10"	21'-3"	**20'-0"**	**16'-0"**
	16"	23'-0"	21'-3"	**20'-3"**	**19'-3"**	24'-1"	22'-4"	**21'-0"**	**16'-9"**	23'-8"	22'-0"	**21'-0"**	**19'-6"**	24'-11"	23'-2"	**21'-0"**	**16'-9"**
PWI 36L, LPI 36	**11-7/8"**	19'-7"	18'-2"	17'-5"	**16'-9"**	20'-7"	19'-0"	18'-2"	**17'-4"**	20'-2"	18'-9"	17'-10"	**17'-2"**	21'-2"	19'-8"	**18'-9"**	**17'-7"**
	14"	21'-9"	20'-1"	19'-2"	**18'-2"**	22'-10"	21'-1"	**20'-1"**	**17'-7"**	22'-5"	20'-9"	**19'-10"**	**18'-10"**	23'-6"	21'-10"	**20'-10"**	**17'-7"**
	16"	23'-7"	21'-10"	**20'-10"**	**19'-9"**	24'-9"	**22'-11"**	**21'-10"**	**17'-7"**	24'-4"	22'-7"	**21'-6"**	**20'-5"**	25'-6"	**23'-8"**	**22'-0"**	**17'-7"**
	18"	25'-4"	23'-5"	**22'-3"**	**21'-1"**	26'-8"	**24'-8"**	**22'-0"**	**17'-6"**	26'-1"	24'-2"	**23'-1"**	**21'-11"**	27'-6"	**25'-6"**	**22'-0"**	**17'-6"**
PWI 42S, LPI 42Plus	**9-1/2"**	17'-11"	16'-10"	16'-3"	15'-7"	18'-9"	17'-5"	16'-9"	16'-1"	18'-4"	17'-2"	16'-7"	15'-10"	19'-3"	17'-10"	17'-2"	16'-4"
	11-7/8"	20'-9"	19'-2"	18'-3"	17'-5"	21'-9"	20'-1"	19'-1"	18'-1"	21'-3"	19'-8"	18'-9"	17'-10"	22'-4"	20'-8"	19'-8"	**18'-8"**
	14"	23'-0"	21'-3"	20'-3"	19'-2"	24'-2"	22'-4"	21'-3"	**20'-1"**	23'-8"	21'-11"	20'-10"	19'-9"	24'-10"	23'-0"	21'-11"	**20'-9"**
	16"	25'-1"	23'-2"	22'-1"	**20'-11"**	26'-4"	24'-4"	23'-2"	**21'-11"**	25'-9"	23'-10"	22'-9"	**21'-6"**	27'-1"	25'-1"	23'-10"	**22'-7"**
	18"	26'-8"	24'-8"	23'-6"	22'-3"	28'-2"	26'-0"	24'-9"	**23'-5"**	27'-5"	25'-5"	24'-3"	**22'-11"**	28'-11"	26'-9"	25'-6"	**24'-2"**
	20"	28'-6"	26'-4"	25'-1"	**23'-9"**	30'-1"	27'-9"	**26'-5"**	**25'-0"**	29'-4"	27'-2"	25'-11"	**24'-6"**	30'-11"	28'-8"	**27'-4"**	**25'-10"**
	24"	32'-1"	29'-7"	**28'-2"**	**26'-7"**	34'-5"	31'-2"	**29'-8"**	**26'-8"**	33'-3"	30'-6"	**29'-1"**	**27'-6"**	35'-8"	**32'-3"**	**30'-8"**	**26'-8"**
PWI 52S, LPI 52Plus	**11-7/8"**	21'-3"	19'-8"	18'-9"	17'-10"	22'-4"	20'-7"	19'-8"	18'-7"	21'-9"	20'-2"	19'-3"	18'-3"	22'-10"	21'-2"	20'-2"	19'-1"
	14"	23'-8"	21'-10"	20'-9"	19'-8"	24'-10"	22'-11"	21'-10"	**20'-8"**	24'-2"	22'-5"	21'-4"	20'-3"	25'-5"	23'-6"	22'-5"	**21'-3"**
	16"	25'-9"	23'-9"	22'-7"	21'-5"	27'-0"	24'-11"	23'-9"	**22'-5"**	26'-4"	24'-5"	23'-3"	**22'-0"**	27'-8"	25'-7"	24'-5"	**23'-1"**
PWI 56L, LPI 56	**11-7/8"**	21'-9"	20'-1"	19'-1"	**18'-1"**	22'-10"	21'-0"	20'-0"	**18'-11"**	22'-3"	20'-6"	19'-7"	**18'-6"**	23'-4"	21'-7"	20'-6"	**19'-5"**
	14"	24'-1"	22'-3"	21'-2"	**20'-0"**	25'-4"	23'-4"	22'-2"	**21'-0"**	24'-8"	22'-9"	21'-8"	**20'-6"**	25'-11"	23'-11"	22'-9"	**21'-7"**
	16"	26'-2"	24'-2"	**22'-11"**	**21'-9"**	27'-6"	25'-4"	**24'-1"**	**22'-10"**	26'-9"	24'-9"	**23'-7"**	**22'-4"**	28'-2"	26'-0"	**24'-9"**	**23'-5"**
	18"	28'-1"	25'-10"	**24'-7"**	**23'-3"**	29'-7"	27'-3"	**25'-11"**	**24'-6"**	28'-9"	26'-7"	**25'-3"**	**23'-11"**	30'-3"	28'-0"	**26'-8"**	**25'-3"**
	24"	34'-0"	**30'-10"**	**29'-4"**	**27'-8"**	36'-7"	**32'-10"**	**30'-11"**	**27'-11"**	35'-1"	**31'-8"**	**30'-2"**	**28'-6"**	37'-9"	**34'-1"**	**31'-11"**	**27'-11"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: bare joist L/360 on live load and L/240 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

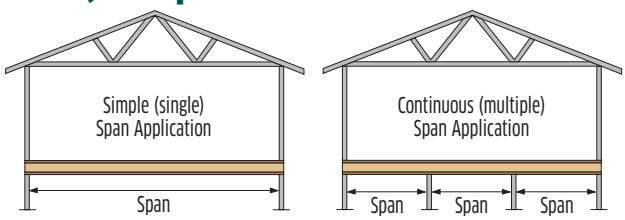
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 50 psf Live Load, 35 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



50 PSF LIVE LOAD, 35 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-1"	14'-8"	13'-10"	12'-5"	16'-10"	15'-1"	13'-9"	**12'-4"**	16'-1"	14'-8"	13'-10"	12'-5"	17'-4"	15'-1"	13'-9"	**12'-4"**
	11-7/8"	18'-4"	17'-3"	16'-1"	**14'-4"**	19'-3"	17'-6"	**16'-0"**	**13'-2"**	19'-0"	17'-6"	16'-1"	**14'-4"**	19'-11"	17'-6"	**16'-0"**	**13'-2"**
	14"	20'-6"	19'-0"	**17'-5"**	**15'-6"**	21'-5"	19'-0"	**17'-4"**	**13'-11"**	21'-2"	19'-1"	**17'-5"**	**15'-6"**	21'-11"	19'-0"	**17'-4"**	**13'-11"**
	16"	22'-4"	**20'-5"**	**18'-8"**	**16'-8"**	23'-5"	**20'-4"**	**18'-4"**	**14'-7"**	23'-1"	**20'-5"**	**18'-8"**	**16'-8"**	23'-6"	**20'-4"**	**18'-4"**	**14'-7"**
PWI 32S, LPI 32Plus	**9-1/2"**	16'-9"	15'-5"	14'-7"	**13'-6"**	17'-4"	16'-4"	**15'-1"**	**12'-5"**	17'-0"	15'-5"	14'-7"	**13'-6"**	17'-9"	16'-6"	**15'-1"**	**12'-5"**
	11-7/8"	19'-0"	17'-8"	**17'-0"**	**15'-5"**	19'-11"	**18'-5"**	**16'-6"**	**13'-2"**	19'-7"	18'-2"	**17'-3"**	**15'-5"**	20'-7"	**18'-10"**	**16'-6"**	**13'-2"**
	14"	21'-1"	**19'-7"**	**18'-8"**	**16'-11"**	22'-2"	**20'-6"**	**17'-5"**	**13'-11"**	21'-9"	**20'-3"**	**18'-11"**	**16'-11"**	22'-10"	**20'-8"**	**17'-5"**	**13'-11"**
	16"	23'-0"	**21'-3"**	**20'-3"**	**18'-3"**	24'-1"	**22'-0"**	**18'-4"**	**14'-7"**	23'-8"	**22'-0"**	**20'-5"**	**18'-3"**	24'-11"	**22'-0"**	**18'-4"**	**14'-7"**
PWI 36L, LPI 36	**11-7/8"**	19'-7"	18'-2"	**17'-5"**	**16'-9"**	20'-7"	19'-0"	**18'-2"**	**15'-4"**	20'-2"	18'-9"	**17'-10"**	**16'-9"**	21'-2"	19'-8"	**18'-9"**	**15'-4"**
	14"	21'-9"	20'-1"	**19'-2"**	**18'-2"**	22'-10"	**21'-1"**	**19'-3"**	**15'-4"**	22'-5"	**20'-9"**	**19'-10"**	**18'-10"**	23'-6"	**21'-10"**	**19'-3"**	**15'-4"**
	16"	23'-7"	**21'-10"**	**20'-10"**	**19'-2"**	24'-9"	**22'-11"**	**19'-3"**	**15'-4"**	24'-4"	**22'-7"**	**21'-6"**	**19'-2"**	25'-6"	**23'-1"**	**19'-3"**	**15'-4"**
	18"	25'-4"	**23'-5"**	**22'-3"**	**21'-1"**	**26'-8"**	**23'-1"**	**19'-2"**	**15'-3"**	26'-1"	**24'-2"**	**23'-1"**	**21'-11"**	**27'-6"**	**23'-1"**	**19'-2"**	**15'-3"**
PWI 42S, LPI 42Plus	**9-1/2"**	17'-11"	16'-10"	16'-3"	15'-1"	18'-9"	17'-5"	16'-9"	14'-3"	18'-4"	17'-2"	16'-3"	15'-1"	19'-3"	17'-10"	17'-2"	14'-3"
	11-7/8"	20'-9"	19'-2"	18'-3"	**17'-5"**	21'-9"	20'-1"	19'-1"	**17'-3"**	21'-3"	19'-8"	18'-9"	**17'-10"**	22'-4"	20'-8"	19'-8"	**17'-3"**
	14"	23'-0"	21'-3"	20'-3"	**19'-2"**	24'-2"	22'-4"	**21'-3"**	**18'-8"**	23'-8"	21'-11"	20'-10"	**19'-9"**	24'-10"	23'-0"	**21'-11"**	**18'-8"**
	16"	25'-1"	23'-2"	22'-1"	**20'-11"**	26'-4"	24'-4"	**23'-2"**	**19'-10"**	25'-9"	23'-10"	**22'-9"**	**21'-6"**	27'-1"	25'-1"	**23'-10"**	**19'-10"**
	18"	26'-8"	24'-8"	23'-6"	**22'-3"**	28'-2"	26'-0"	**24'-9"**	**22'-6"**	27'-5"	25'-5"	24'-3"	**22'-11"**	28'-11"	26'-9"	**25'-6"**	**22'-6"**
	20"	28'-7"	26'-4"	**25'-1"**	**23'-9"**	30'-1"	**27'-9"**	**26'-5"**	**23'-2"**	29'-4"	27'-2"	**25'-11"**	**24'-6"**	30'-11"	**28'-8"**	**27'-4"**	**23'-2"**
	24"	32'-1"	**29'-7"**	**28'-2"**	**26'-7"**	34'-5"	**31'-2"**	**29'-2"**	**23'-3"**	33'-3"	**30'-6"**	**29'-1"**	**27'-6"**	35'-8"	**32'-3"**	**29'-2"**	**23'-3"**
PWI 52S, LPI 52Plus	**11-7/8"**	21'-3"	19'-8"	18'-9"	17'-10"	22'-4"	20'-7"	19'-8"	**18'-7"**	21'-9"	20'-2"	19'-3"	18'-3"	22'-10"	21'-2"	20'-2"	**19'-1"**
	14"	23'-8"	21'-10"	20'-9"	**19'-8"**	24'-10"	22'-11"	21'-10"	**20'-8"**	24'-2"	22'-5"	21'-4"	**20'-3"**	25'-5"	23'-6"	22'-5"	**21'-3"**
	16"	25'-9"	23'-9"	22'-7"	**21'-5"**	27'-0"	24'-11"	**23'-9"**	**22'-5"**	26'-4"	24'-5"	23'-3"	**22'-0"**	27'-8"	25'-7"	**24'-5"**	**23'-1"**
PWI 56L, LPI 56	**11-7/8"**	21'-9"	20'-1"	19'-1"	**18'-1"**	22'-10"	21'-0"	20'-0"	**18'-11"**	22'-3"	20'-6"	**19'-7"**	**18'-6"**	23'-4"	21'-7"	20'-6"	**19'-5"**
	14"	24'-1"	22'-3"	**21'-2"**	**20'-0"**	25'-4"	23'-4"	**22'-2"**	**21'-0"**	24'-8"	22'-9"	**21'-8"**	**20'-6"**	25'-11"	23'-11"	**22'-9"**	**21'-4"**
	16"	26'-2"	**24'-2"**	**22'-11"**	**21'-9"**	27'-6"	**25'-4"**	**24'-1"**	**22'-4"**	26'-9"	**24'-9"**	**23'-7"**	**22'-4"**	28'-2"	**26'-0"**	**24'-9"**	**22'-4"**
	18"	28'-1"	**25'-10"**	**24'-7"**	**23'-3"**	29'-7"	**27'-3"**	**25'-11"**	**23'-3"**	28'-9"	**26'-7"**	**25'-3"**	**23'-11"**	30'-3"	**28'-0"**	**26'-8"**	**23'-3"**
	24"	34'-0"	**30'-10"**	**29'-4"**	**27'-8"**	**36'-7"**	**32'-10"**	**30'-6"**	**24'-4"**	35'-1"	**31'-8"**	**30'-2"**	**28'-6"**	**37'-9"**	**34'-1"**	**30'-6"**	**24'-4"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

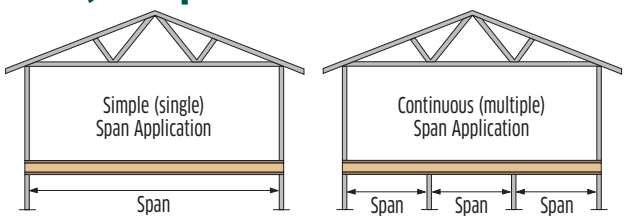
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 50 psf Live Load, 45 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



50 PSF LIVE LOAD, 45 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-1"	14'-5"	13'-2"	**11'-9"**	16'-7"	14'-4"	**13'-1"**	**11'-2"**	16'-1"	14'-5"	13'-2"	**11'-9"**	16'-7"	14'-4"	**13'-1"**	**11'-2"**
	11-7/8"	18'-4"	16'-9"	**15'-3"**	**13'-8"**	19'-3"	**16'-8"**	**14'-11"**	**11'-11"**	19'-0"	16'-9"	**15'-3"**	**13'-8"**	19'-3"	**16'-8"**	**14'-11"**	**11'-11"**
	14"	20'-6"	**18'-2"**	**16'-6"**	**14'-9"**	20'-10"	**18'-1"**	**15'-9"**	**12'-7"**	20'-11"	**18'-2"**	**16'-6"**	**14'-9"**	20'-10"	**18'-1"**	**15'-9"**	**12'-7"**
	16"	22'-4"	**19'-5"**	**17'-9"**	**15'-10"**	22'-5"	**19'-4"**	**16'-7"**	**13'-2"**	22'-6"	**19'-5"**	**17'-9"**	**15'-10"**	22'-5"	**19'-4"**	**16'-7"**	**13'-2"**
PWI 32S, LPI 32Plus	**9-1/2"**	16'-9"	15'-5"	14'-5"	**12'-10"**	17'-4"	**15'-8"**	**14'-0"**	**11'-2"**	17'-0"	15'-5"	14'-5"	**12'-10"**	17'-9"	**15'-8"**	**14'-0"**	**11'-2"**
	11-7/8"	19'-0"	**17'-8"**	**16'-5"**	**14'-8"**	19'-11"	**17'-11"**	**14'-11"**	**11'-11"**	19'-7"	**18'-0"**	**16'-5"**	**14'-8"**	20'-7"	**17'-11"**	**14'-11"**	**11'-11"**
	14"	21'-1"	**19'-7"**	**18'-0"**	**16'-1"**	22'-2"	**19'-0"**	**15'-9"**	**12'-7"**	21'-9"	**19'-9"**	**18'-0"**	**16'-1"**	22'-9"	**19'-0"**	**15'-9"**	**12'-7"**
	16"	23'-0"	**21'-3"**	**19'-5"**	**17'-4"**	24'-1"	**19'-11"**	**16'-7"**	**13'-2"**	**23'-8"**	**21'-3"**	**19'-5"**	**17'-4"**	**24'-6"**	**19'-11"**	**16'-7"**	**13'-2"**
PWI 36L, LPI 36	**11-7/8"**	19'-7"	18'-2"	**17'-5"**	**16'-9"**	20'-7"	**19'-0"**	**17'-4"**	**13'-10"**	20'-2"	**18'-9"**	**17'-10"**	**16'-9"**	21'-2"	**19'-8"**	**17'-4"**	**13'-10"**
	14"	21'-9"	**20'-1"**	**19'-2"**	**17'-3"**	22'-10"	**20'-11"**	**17'-4"**	**13'-10"**	22'-5"	**20'-9"**	**19'-10"**	**17'-3"**	23'-6"	**20'-11"**	**17'-4"**	**13'-10"**
	16"	23'-7"	**21'-10"**	**20'-10"**	**17'-3"**	**24'-9"**	**20'-11"**	**17'-4"**	**13'-10"**	24'-4"	**22'-7"**	**21'-6"**	**17'-3"**	**25'-6"**	**20'-11"**	**17'-4"**	**13'-10"**
	18"	25'-4"	**23'-5"**	**22'-3"**	**21'-1"**	**26'-8"**	**20'-10"**	**17'-4"**	**13'-10"**	26'-1"	**24'-2"**	**23'-1"**	**21'-2"**	**27'-6"**	**20'-10"**	**17'-4"**	**13'-10"**
PWI 42S, LPI 42Plus	**9-1/2"**	17'-11"	16'-10"	16'-3"	**15'-1"**	18'-9"	17'-5"	16'-1"	12'-10"	18'-4"	17'-2"	16'-3"	**15'-1"**	19'-3"	17'-10"	16'-1"	12'-10"
	11-7/8"	20'-9"	19'-2"	18'-3"	**17'-5"**	21'-9"	20'-1"	**19'-1"**	**15'-7"**	21'-3"	19'-8"	18'-9"	**17'-10"**	22'-4"	20'-8"	**19'-6"**	**15'-7"**
	14"	23'-0"	21'-3"	**20'-3"**	**19'-2"**	24'-2"	22'-4"	**21'-2"**	**16'-11"**	23'-8"	21'-11"	**20'-10"**	**19'-9"**	24'-10"	**23'-0"**	**21'-2"**	**16'-11"**
	16"	25'-1"	23'-2"	**22'-1"**	**20'-11"**	26'-4"	**24'-4"**	**22'-5"**	**17'-11"**	25'-9"	23'-10"	**22'-9"**	**21'-6"**	27'-1"	**25'-1"**	**22'-5"**	**17'-11"**
	18"	26'-8"	24'-8"	**23'-6"**	**22'-3"**	28'-2"	**26'-0"**	**24'-9"**	**20'-4"**	27'-5"	25'-5"	**24'-3"**	**22'-11"**	28'-11"	**26'-9"**	**25'-6"**	**20'-4"**
	20"	28'-7"	26'-4"	**25'-1"**	**23'-9"**	30'-1"	**27'-9"**	**26'-3"**	**20'-11"**	29'-4"	**27'-2"**	**25'-11"**	**24'-6"**	30'-11"	**28'-8"**	**26'-3"**	**20'-11"**
	24"	32'-1"	**29'-7"**	**28'-2"**	**26'-7"**	**34'-5"**	**31'-2"**	**26'-4"**	**21'-0"**	33'-3"	**30'-6"**	**29'-1"**	**26'-10"**	**35'-8"**	**31'-8"**	**26'-4"**	**21'-0"**
PWI 52S, LPI 52Plus	**11-7/8"**	21'-3"	19'-8"	18'-9"	**17'-10"**	22'-4"	20'-7"	19'-8"	**18'-7"**	21'-9"	20'-2"	19'-3"	**18'-3"**	22'-10"	21'-2"	20'-2"	**19'-0"**
	14"	23'-8"	21'-10"	20'-9"	**19'-8"**	24'-10"	22'-11"	**21'-10"**	**20'-3"**	24'-2"	22'-5"	**21'-4"**	**20'-3"**	25'-5"	23'-6"	**22'-5"**	**20'-3"**
	16"	25'-9"	23'-9"	**22'-7"**	**21'-5"**	27'-0"	**24'-11"**	**23'-9"**	**21'-1"**	26'-4"	24'-5"	**23'-3"**	**22'-0"**	27'-8"	**25'-7"**	**24'-5"**	**21'-1"**
PWI 56L, LPI 56	**11-7/8"**	21'-9"	20'-1"	**19'-1"**	**18'-1"**	22'-10"	21'-0"	**20'-0"**	**18'-4"**	22'-3"	20'-6"	**19'-7"**	**18'-6"**	23'-4"	21'-7"	**20'-6"**	**18'-4"**
	14"	24'-1"	**22'-3"**	**21'-2"**	**20'-0"**	25'-4"	**23'-4"**	**22'-2"**	**19'-3"**	24'-8"	**22'-9"**	**21'-8"**	**20'-6"**	25'-11"	**23'-11"**	**22'-9"**	**19'-3"**
	16"	26'-2"	**24'-2"**	**22'-11"**	**21'-9"**	27'-6"	**25'-4"**	**24'-1"**	**20'-2"**	26'-9"	**24'-9"**	**23'-7"**	**22'-4"**	28'-2"	**26'-0"**	**24'-9"**	**20'-2"**
	18"	28'-1"	**25'-10"**	**24'-7"**	**23'-3"**	29'-7"	**27'-3"**	**25'-11"**	**21'-1"**	28'-9"	**26'-7"**	**25'-3"**	**23'-11"**	**30'-3"**	**28'-0"**	**26'-5"**	**21'-1"**
	24"	**34'-0"**	**30'-10"**	**29'-4"**	**27'-8"**	**36'-7"**	**32'-10"**	**27'-7"**	**22'-0"**	**35'-1"**	**31'-8"**	**30'-2"**	**28'-6"**	**37'-9"**	**33'-2"**	**27'-7"**	**22'-0"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

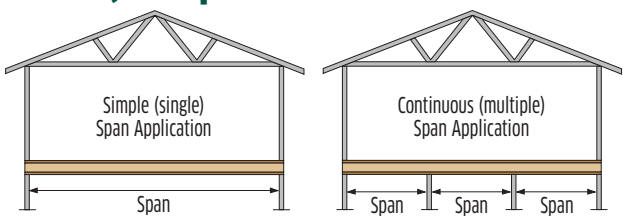
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 100 psf Live Load, 35 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



100 PSF LIVE LOAD, 35 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling						Direct Attached 1/2" Gypsum Ceiling					
		Maximum Simple Spans			Maximum Continuous Spans			Maximum Simple Spans			Maximum Continuous Spans		
		12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc
PWI 20S, LPI 20Plus	9-1/2"	12'-6"	11'-4"	**10'-8"**	13'-7"	**11'-4"**	**9'-5"**	12'-6"	11'-4"	**10'-8"**	13'-7"	**11'-4"**	**9'-5"**
	11-7/8"	15'-0"	**13'-7"**	**12'-6"**	**15'-10"**	**12'-1"**	**10'-0"**	15'-0"	**13'-7"**	**12'-6"**	**15'-10"**	**12'-1"**	**10'-0"**
	14"	**17'-1"**	**14'-11"**	**13'-7"**	**17'-1"**	**12'-9"**	**10'-7"**	**17'-1"**	**14'-11"**	**13'-7"**	**17'-1"**	**12'-9"**	**10'-7"**
	16"	**18'-5"**	**16'-0"**	**14'-7"**	**18'-0"**	**13'-5"**	**11'-2"**	**18'-5"**	**16'-0"**	**14'-7"**	**18'-0"**	**13'-5"**	**11'-2"**
PWI 32S, LPI 32Plus	9-1/2"	13'-2"	**11'-11"**	**11'-2"**	**14'-3"**	**11'-4"**	**9'-5"**	13'-2"	**11'-11"**	**11'-2"**	**14'-3"**	**11'-4"**	**9'-5"**
	11-7/8"	15'-8"	**14'-3"**	**12'-10"**	**16'-2"**	**12'-1"**	**10'-0"**	15'-8"	**14'-3"**	**12'-10"**	**16'-2"**	**12'-1"**	**10'-0"**
	14"	**17'-10"**	**16'-2"**	**14'-2"**	**17'-1"**	**12'-9"**	**10'-7"**	**17'-10"**	**16'-2"**	**14'-2"**	**17'-1"**	**12'-9"**	**10'-7"**
	16"	**19'-9"**	**17'-6"**	**15'-3"**	**18'-0"**	**13'-5"**	**11'-2"**	**19'-9"**	**17'-6"**	**15'-3"**	**18'-0"**	**13'-5"**	**11'-2"**
PWI 36L, LPI 36	11-7/8"	16'-5"	**14'-10"**	**13'-11"**	**17'-9"**	**14'-1"**	**11'-8"**	16'-5"	**14'-10"**	**13'-11"**	**17'-9"**	**14'-1"**	**11'-8"**
	14"	**18'-7"**	**16'-10"**	**14'-7"**	**18'-10"**	**14'-1"**	**11'-8"**	**18'-7"**	**16'-10"**	**14'-7"**	**18'-10"**	**14'-1"**	**11'-8"**
	16"	**20'-6"**	**17'-7"**	**14'-7"**	**18'-10"**	**14'-1"**	**11'-8"**	**20'-6"**	**17'-7"**	**14'-7"**	**18'-10"**	**14'-1"**	**11'-8"**
	18"	**22'-4"**	**20'-2"**	**17'-10"**	**18'-10"**	**14'-0"**	**11'-8"**	**22'-4"**	**20'-2"**	**17'-10"**	**18'-10"**	**14'-0"**	**11'-8"**
PWI 42S, LPI 42Plus	9-1/2"	14'-9"	13'-4"	**12'-6"**	16'-0"	13'-1"	10'-11"	14'-9"	13'-4"	**12'-6"**	16'-0"	13'-1"	10'-11"
	11-7/8"	17'-8"	**16'-0"**	**15'-0"**	19'-2"	**15'-10"**	**13'-3"**	17'-8"	**16'-0"**	**15'-0"**	19'-2"	**15'-10"**	**13'-3"**
	14"	20'-1"	**18'-2"**	**16'-9"**	**21'-10"**	**17'-2"**	**14'-3"**	20'-1"	**18'-2"**	**16'-9"**	**21'-10"**	**17'-2"**	**14'-3"**
	16"	**22'-4"**	**20'-2"**	**18'-4"**	**24'-3"**	**18'-2"**	**15'-2"**	**22'-4"**	**20'-2"**	**18'-4"**	**24'-3"**	**18'-2"**	**15'-2"**
	18"	**24'-1"**	**21'-10"**	**20'-6"**	**26'-2"**	**20'-8"**	**17'-2"**	**24'-1"**	**21'-10"**	**20'-6"**	**26'-2"**	**20'-8"**	**17'-2"**
	20"	**26'-1"**	**23'-7"**	**22'-2"**	**28'-5"**	**21'-3"**	**17'-8"**	**26'-1"**	**23'-7"**	**22'-2"**	**28'-5"**	**21'-3"**	**17'-8"**
	24"	**29'-11"**	**27'-1"**	**24'-8"**	**28'-7"**	**21'-4"**	**17'-9"**	**29'-11"**	**27'-1"**	**24'-8"**	**28'-7"**	**21'-4"**	**17'-9"**
PWI 52S, LPI 52Plus	11-7/8"	18'-4"	16'-7"	**15'-7"**	19'-11"	**18'-0"**	**16'-1"**	18'-4"	16'-7"	**15'-7"**	19'-11"	**18'-0"**	**16'-1"**
	14"	20'-10"	**18'-10"**	**17'-9"**	**22'-8"**	**20'-6"**	**17'-1"**	20'-10"	**18'-10"**	**17'-9"**	**22'-8"**	**20'-6"**	**17'-1"**
	16"	23'-1"	**20'-11"**	**19'-7"**	**25'-1"**	**21'-5"**	**17'-9"**	23'-1"	**20'-11"**	**19'-7"**	**25'-1"**	**21'-5"**	**17'-9"**
PWI 56L, LPI 56	11-7/8"	18'-10"	**17'-0"**	**15'-11"**	**20'-5"**	**18'-5"**	**15'-6"**	18'-10"	**17'-0"**	**15'-11"**	**20'-5"**	**18'-5"**	**15'-6"**
	14"	**21'-4"**	**19'-3"**	**18'-1"**	**23'-2"**	**19'-7"**	**16'-3"**	**21'-4"**	**19'-3"**	**18'-1"**	**23'-2"**	**19'-7"**	**16'-3"**
	16"	**23'-7"**	**21'-4"**	**19'-2"**	**25'-7"**	**20'-6"**	**17'-0"**	**23'-7"**	**21'-4"**	**19'-2"**	**25'-7"**	**20'-6"**	**17'-0"**
	18"	**25'-8"**	**23'-2"**	**21'-9"**	**27'-11"**	**21'-5"**	**17'-9"**	**25'-8"**	**23'-2"**	**21'-9"**	**27'-11"**	**21'-5"**	**17'-9"**
	24"	**31'-8"**	**28'-8"**	**26'-10"**	**29'-11"**	**22'-4"**	**18'-7"**	**31'-8"**	**28'-8"**	**26'-10"**	**29'-11"**	**22'-4"**	**18'-7"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
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9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = L * s * (A * D_f - L_f) / B (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

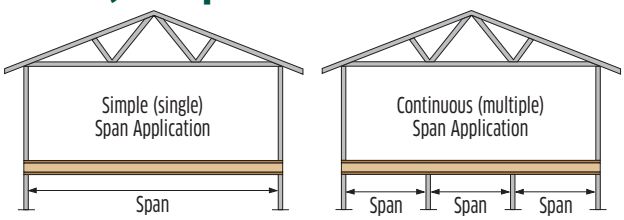
Floor Span Tables: 23/32 OSB Sheathing

Specified Floor Loads: 100 psf Live Load, 45 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



100 PSF LIVE LOAD, 45 PSF DEAD LOAD: 23/32" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling						Direct Attached 1/2" Gypsum Ceiling					
		Maximum Simple Spans			Maximum Continuous Spans			Maximum Simple Spans			Maximum Continuous Spans		
		12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc	12" oc	16" oc	19.2" oc
PWI 20S, LPI 20Plus	9-1/2"	12'-6"	11'-4"	10'-6"	13'-3"	10'-8"	8'-10"	12'-6"	11'-4"	10'-6"	13'-3"	10'-8"	8'-10"
	11-7/8"	15'-0"	13'-4"	12'-1"	15'-3"	11'-4"	9'-5"	15'-0"	13'-4"	12'-1"	15'-3"	11'-4"	9'-5"
	14"	16'-8"	14'-5"	13'-2"	16'-1"	12'-0"	9'-11"	16'-8"	14'-5"	13'-2"	16'-1"	12'-0"	9'-11"
	16"	17'-11"	15'-6"	14'-1"	16'-10"	12'-7"	10'-5"	17'-11"	15'-6"	14'-1"	16'-10"	12'-7"	10'-5"
PWI 32S, LPI 32Plus	9-1/2"	13'-2"	11'-11"	10'-8"	14'-3"	10'-8"	8'-10"	13'-2"	11'-11"	10'-8"	14'-3"	10'-8"	8'-10"
	11-7/8"	15'-8"	14'-3"	12'-1"	15'-3"	11'-4"	9'-5"	15'-8"	14'-3"	12'-1"	15'-3"	11'-4"	9'-5"
	14"	17'-10"	15'-9"	13'-3"	16'-1"	12'-0"	9'-11"	17'-10"	15'-9"	13'-3"	16'-1"	12'-0"	9'-11"
	16"	19'-7"	16'-11"	14'-4"	16'-10"	12'-7"	10'-5"	19'-7"	16'-11"	14'-4"	16'-10"	12'-7"	10'-5"
PWI 36L, LPI 36	11-7/8"	16'-5"	14'-10"	13'-8"	17'-8"	13'-2"	10'-11"	16'-5"	14'-10"	13'-8"	17'-8"	13'-2"	10'-11"
	14"	18'-7"	16'-6"	13'-8"	17'-8"	13'-2"	10'-11"	18'-7"	16'-6"	13'-8"	17'-8"	13'-2"	10'-11"
	16"	20'-6"	16'-6"	13'-8"	17'-8"	13'-2"	10'-11"	20'-6"	16'-6"	13'-8"	17'-8"	13'-2"	10'-11"
	18"	22'-4"	20'-2"	16'-9"	17'-8"	13'-2"	10'-11"	22'-4"	20'-2"	16'-9"	17'-8"	13'-2"	10'-11"
PWI 42S, LPI 42Plus	9-1/2"	14'-9"	13'-4"	12'-6"	16'-0"	12'-3"	10'-3"	14'-9"	13'-4"	12'-6"	16'-0"	12'-3"	10'-3"
	11-7/8"	17'-8"	16'-0"	14'-3"	19'-2"	14'-11"	12'-5"	17'-8"	16'-0"	14'-3"	19'-2"	14'-11"	12'-5"
	14"	20'-1"	18'-2"	15'-9"	21'-7"	16'-1"	13'-5"	20'-1"	18'-2"	15'-9"	21'-7"	16'-1"	13'-5"
	16"	22'-4"	20'-2"	17'-2"	22'-10"	17'-1"	14'-2"	22'-4"	20'-2"	17'-2"	22'-10"	17'-1"	14'-2"
	18"	24'-1"	21'-10"	20'-6"	25'-11"	19'-5"	16'-1"	24'-1"	21'-10"	20'-6"	25'-11"	19'-5"	16'-1"
	20"	26'-1"	23'-7"	21'-11"	26'-8"	19'-11"	16'-7"	26'-1"	23'-7"	21'-11"	26'-8"	19'-11"	16'-7"
	24"	29'-11"	26'-3"	23'-11"	26'-10"	20'-0"	16'-8"	29'-11"	26'-3"	23'-11"	26'-10"	20'-0"	16'-8"
PWI 52S, LPI 52Plus	11-7/8"	18'-4"	16'-7"	15'-7"	19'-11"	18'-0"	15'-1"	18'-4"	16'-7"	15'-7"	19'-11"	18'-0"	15'-1"
	14"	20'-10"	18'-10"	17'-9"	22'-8"	19'-4"	16'-1"	20'-10"	18'-10"	17'-9"	22'-8"	19'-4"	16'-1"
	16"	23'-1"	20'-11"	19'-7"	25'-1"	20'-1"	16'-8"	23'-1"	20'-11"	19'-7"	25'-1"	20'-1"	16'-8"
PWI 56L, LPI 56	11-7/8"	18'-10"	17'-0"	15'-11"	20'-5"	17'-6"	14'-6"	18'-10"	17'-0"	15'-11"	20'-5"	17'-6"	14'-6"
	14"	21'-4"	19'-3"	17'-0"	23'-2"	18'-4"	15'-3"	21'-4"	19'-3"	17'-0"	23'-2"	18'-4"	15'-3"
	16"	23'-7"	21'-4"	18'-0"	25'-7"	19'-3"	16'-0"	23'-7"	21'-4"	18'-0"	25'-7"	19'-3"	16'-0"
	18"	25'-8"	23'-2"	21'-6"	26'-10"	20'-1"	16'-8"	25'-8"	23'-2"	21'-6"	26'-10"	20'-1"	16'-8"
	24"	31'-8"	28'-8"	26'-0"	28'-1"	21'-0"	17'-5"	31'-8"	28'-8"	26'-0"	28'-1"	21'-0"	17'-5"

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

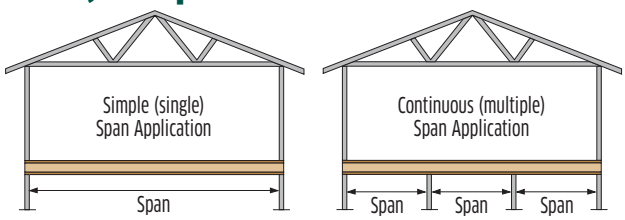
Floor Span Tables: 7/8 OSB Sheathing

Specified Floor Loads: 50 psf Live Load, 35 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



50 PSF LIVE LOAD, 35 PSF DEAD LOAD: 7/8" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-3"	14'-10"	13'-10"	12'-5"	17'-6"	15'-1"	13'-9"	**12'-4"**	16'-3"	14'-10"	13'-10"	12'-5"	17'-6"	15'-1"	13'-9"	**12'-4"**
	11-7/8"	19'-5"	17'-7"	16'-1"	**14'-4"**	20'-3"	17'-6"	**16'-0"**	**13'-2"**	19'-5"	17'-7"	16'-1"	**14'-4"**	20'-3"	17'-6"	**16'-0"**	**13'-2"**
	14"	21'-11"	19'-1"	**17'-5"**	**15'-6"**	21'-11"	19'-0"	**17'-4"**	**13'-11"**	22'-0"	19'-1"	**17'-5"**	**15'-6"**	21'-11"	19'-0"	**17'-4"**	**13'-11"**
	16"	23'-7"	**20'-5"**	**18'-8"**	**16'-8"**	23'-6"	**20'-4"**	**18'-4"**	**14'-7"**	23'-7"	**20'-5"**	**18'-8"**	**16'-8"**	23'-6"	**20'-4"**	**18'-4"**	**14'-7"**
PWI 32S, LPI 32Plus	**9-1/2"**	17'-2"	15'-7"	14'-9"	**13'-6"**	18'-6"	16'-6"	**15'-1"**	**12'-5"**	17'-2"	15'-7"	14'-9"	**13'-6"**	18'-7"	16'-6"	**15'-1"**	**12'-5"**
	11-7/8"	20'-5"	18'-7"	**17'-3"**	**15'-5"**	21'-4"	**18'-10"**	**16'-6"**	**13'-2"**	20'-5"	18'-7"	**17'-3"**	**15'-5"**	21'-9"	**18'-10"**	**16'-6"**	**13'-2"**
	14"	22'-7"	**20'-9"**	**18'-11"**	**16'-11"**	23'-9"	**20'-8"**	**17'-5"**	**13'-11"**	23'-1"	**20'-9"**	**18'-11"**	**16'-11"**	23'-11"	**20'-8"**	**17'-5"**	**13'-11"**
	16"	24'-7"	**22'-5"**	**20'-5"**	**18'-3"**	25'-9"	**22'-0"**	**18'-4"**	**14'-7"**	25'-4"	**22'-5"**	**20'-5"**	**18'-3"**	25'-9"	**22'-0"**	**18'-4"**	**14'-7"**
PWI 36L, LPI 36	**11-7/8"**	21'-0"	19'-4"	**18'-3"**	**16'-11"**	22'-0"	**20'-5"**	**19'-3"**	**15'-4"**	21'-3"	19'-4"	**18'-3"**	**16'-11"**	22'-7"	**21'-0"**	**19'-3"**	**15'-4"**
	14"	23'-3"	**21'-7"**	**20'-7"**	**19'-2"**	24'-5"	**22'-8"**	**19'-3"**	**15'-4"**	23'-11"	**21'-11"**	**20'-7"**	**19'-2"**	25'-1"	**23'-1"**	**19'-3"**	**15'-4"**
	16"	25'-3"	**23'-5"**	**22'-3"**	**19'-2"**	**26'-6"**	**23'-1"**	**19'-3"**	**15'-4"**	25'-11"	**24'-2"**	**22'-9"**	**19'-2"**	**27'-3"**	**23'-1"**	**19'-3"**	**15'-4"**
	18"	27'-1"	**25'-1"**	**23'-10"**	**22'-6"**	**28'-6"**	**23'-1"**	**19'-2"**	**15'-3"**	27'-10"	**25'-11"**	**24'-8"**	**23'-0"**	**29'-4"**	**23'-1"**	**19'-2"**	**15'-3"**
PWI 42S, LPI 42Plus	**9-1/2"**	19'-2"	17'-5"	16'-5"	15'-3"	20'-1"	18'-8"	17'-9"	14'-3"	19'-2"	17'-5"	16'-5"	15'-3"	20'-7"	18'-11"	17'-10"	14'-3"
	11-7/8"	22'-2"	20'-6"	19'-6"	**18'-2"**	23'-3"	21'-6"	**20'-6"**	**17'-3"**	22'-8"	20'-10"	19'-7"	**18'-2"**	23'-10"	22'-1"	**21'-0"**	**17'-3"**
	14"	24'-8"	22'-10"	21'-8"	**20'-5"**	25'-10"	23'-11"	**22'-9"**	**18'-8"**	25'-2"	23'-5"	**22'-3"**	**20'-8"**	26'-5"	24'-7"	**23'-5"**	**18'-8"**
	16"	26'-10"	24'-10"	**23'-7"**	**22'-3"**	28'-2"	**26'-1"**	**24'-9"**	**19'-10"**	27'-5"	25'-6"	**24'-3"**	**22'-10"**	28'-10"	**26'-9"**	**24'-10"**	**19'-10"**
	18"	28'-6"	26'-5"	**25'-2"**	**23'-8"**	30'-0"	**27'-10"**	**26'-6"**	**22'-6"**	29'-2"	27'-2"	**25'-10"**	**24'-5"**	30'-9"	**28'-7"**	**27'-3"**	**22'-6"**
	20"	30'-6"	28'-3"	**26'-10"**	**25'-3"**	32'-2"	**29'-9"**	**28'-3"**	**23'-2"**	31'-2"	29'-0"	**27'-8"**	**25'-10"**	33'-3"	**30'-7"**	**28'-11"**	**23'-2"**
	24"	34'-11"	**31'-8"**	**30'-1"**	**28'-3"**	**37'-5"**	**33'-10"**	**29'-2"**	**23'-3"**	36'-0"	**32'-9"**	**31'-0"**	**28'-3"**	**38'-8"**	**34'-7"**	**29'-2"**	**23'-3"**
PWI 52S, LPI 52Plus	**11-7/8"**	22'-9"	21'-1"	20'-1"	**18'-10"**	23'-10"	22'-1"	21'-0"	**19'-10"**	23'-3"	21'-7"	20'-4"	**18'-10"**	24'-4"	22'-8"	21'-6"	**20'-4"**
	14"	25'-3"	23'-5"	22'-3"	**20'-11"**	26'-6"	24'-6"	**23'-4"**	**21'-11"**	25'-9"	23'-11"	22'-10"	**21'-5"**	27'-1"	25'-2"	**23'-11"**	**22'-5"**
	16"	27'-6"	25'-5"	**24'-2"**	**22'-9"**	28'-10"	26'-8"	**25'-5"**	**23'-3"**	28'-1"	26'-1"	**24'-10"**	**23'-4"**	29'-5"	**27'-4"**	**26'-1"**	**23'-3"**
PWI 56L, LPI 56	**11-7/8"**	23'-3"	21'-6"	**20'-5"**	**19'-3"**	24'-4"	22'-7"	**21'-5"**	**20'-2"**	23'-8"	22'-0"	**20'-10"**	**19'-4"**	24'-10"	23'-1"	**21'-11"**	**20'-3"**
	14"	25'-9"	**23'-10"**	**22'-8"**	**21'-3"**	27'-0"	**25'-0"**	**23'-9"**	**21'-4"**	26'-3"	**24'-4"**	**23'-2"**	**21'-10"**	27'-7"	**25'-7"**	**24'-4"**	**21'-4"**
	16"	27'-11"	**25'-10"**	**24'-7"**	**23'-1"**	29'-4"	**27'-2"**	**25'-10"**	**22'-4"**	28'-6"	**26'-6"**	**25'-2"**	**23'-8"**	30'-0"	**27'-10"**	**26'-6"**	**22'-4"**
	18"	30'-0"	**27'-9"**	**26'-4"**	**24'-9"**	31'-7"	**29'-3"**	**27'-9"**	**23'-3"**	30'-7"	**28'-4"**	**27'-0"**	**25'-5"**	32'-5"	**29'-11"**	**28'-6"**	**23'-3"**
	24"	**37'-1"**	**33'-5"**	**31'-4"**	**29'-5"**	**39'-9"**	**35'-11"**	**30'-6"**	**24'-4"**	**38'-1"**	**34'-7"**	**32'-4"**	**30'-4"**	**40'-11"**	**36'-8"**	**30'-6"**	**24'-4"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA 0325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

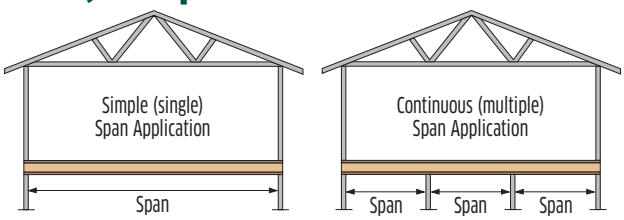
Floor Span Tables: 7/8 OSB Sheathing

Specified Floor Loads: 50 psf Live Load, 45 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



50 PSF LIVE LOAD, 45 PSF DEAD LOAD: 7/8" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	**9-1/2"**	16'-3"	14'-5"	13'-2"	**11'-9"**	16'-7"	14'-4"	**13'-1"**	**11'-2"**	16'-3"	14'-5"	13'-2"	**11'-9"**	16'-7"	14'-4"	**13'-1"**	**11'-2"**
	11-7/8"	19'-4"	16'-9"	**15'-3"**	**13'-8"**	19'-3"	**16'-8"**	**14'-11"**	**11'-11"**	19'-4"	16'-9"	**15'-3"**	**13'-8"**	19'-3"	**16'-8"**	**14'-11"**	**11'-11"**
	14"	20'-11"	**18'-2"**	**16'-6"**	**14'-9"**	20'-10"	**18'-1"**	**15'-9"**	**12'-7"**	20'-11"	**18'-2"**	**16'-6"**	**14'-9"**	20'-10"	**18'-1"**	**15'-9"**	**12'-7"**
	16"	22'-6"	**19'-5"**	**17'-9"**	**15'-10"**	22'-5"	**19'-4"**	**16'-7"**	**13'-2"**	22'-6"	**19'-5"**	**17'-9"**	**15'-10"**	22'-5"	**19'-4"**	**16'-7"**	**13'-2"**
PWI 32S, LPI 32Plus	**9-1/2"**	17'-2"	15'-7"	14'-5"	**12'-10"**	18'-2"	**15'-8"**	**14'-0"**	**11'-2"**	17'-2"	15'-7"	14'-5"	**12'-10"**	18'-2"	**15'-8"**	**14'-0"**	**11'-2"**
	11-7/8"	20'-5"	**18'-0"**	**16'-5"**	**14'-8"**	20'-9"	**17'-11"**	**14'-11"**	**11'-11"**	20'-5"	**18'-0"**	**16'-5"**	**14'-8"**	20'-9"	**17'-11"**	**14'-11"**	**11'-11"**
	14"	22'-7"	**19'-9"**	**18'-0"**	**16'-1"**	22'-9"	**19'-0"**	**15'-9"**	**12'-7"**	22'-10"	**19'-9"**	**18'-0"**	**16'-1"**	22'-9"	**19'-0"**	**15'-9"**	**12'-7"**
	16"	**24'-7"**	**21'-3"**	**19'-5"**	**17'-4"**	**24'-6"**	**19'-11"**	**16'-7"**	**13'-2"**	**24'-7"**	**21'-3"**	**19'-5"**	**17'-4"**	**24'-6"**	**19'-11"**	**16'-7"**	**13'-2"**
PWI 36L, LPI 36	**11-7/8"**	21'-0"	**19'-4"**	**18'-3"**	**16'-11"**	22'-0"	**20'-5"**	**17'-4"**	**13'-10"**	21'-3"	**19'-4"**	**18'-3"**	**16'-11"**	22'-7"	**20'-11"**	**17'-4"**	**13'-10"**
	14"	23'-3"	**21'-7"**	**20'-7"**	**17'-3"**	**24'-5"**	**20'-11"**	**17'-4"**	**13'-10"**	23'-11"	**21'-11"**	**20'-7"**	**17'-3"**	**25'-1"**	**20'-11"**	**17'-4"**	**13'-10"**
	16"	**25'-3"**	**23'-5"**	**21'-8"**	**17'-3"**	**26'-6"**	**20'-11"**	**17'-4"**	**13'-10"**	**25'-11"**	**24'-2"**	**21'-8"**	**17'-3"**	**27'-3"**	**20'-11"**	**17'-4"**	**13'-10"**
	18"	27'-1"	**25'-1"**	**23'-10"**	**21'-2"**	**27'-11"**	**20'-10"**	**17'-4"**	**13'-10"**	**27'-10"**	**25'-11"**	**24'-8"**	**21'-2"**	**27'-11"**	**20'-10"**	**17'-4"**	**13'-10"**
PWI 42S, LPI 42Plus	**9-1/2"**	19'-2"	17'-5"	16'-5"	**15'-3"**	20'-1"	18'-8"	16'-1"	12'-10"	19'-2"	17'-5"	16'-5"	**15'-3"**	20'-7"	18'-11"	16'-1"	12'-10"
	11-7/8"	22'-2"	20'-6"	**19'-6"**	**18'-0"**	23'-3"	21'-6"	**19'-6"**	**15'-7"**	22'-8"	20'-10"	**19'-7"**	**18'-0"**	23'-10"	**22'-1"**	**19'-6"**	**15'-7"**
	14"	24'-8"	22'-10"	**21'-8"**	**19'-11"**	25'-10"	**23'-11"**	**21'-2"**	**16'-11"**	25'-2"	23'-5"	**22'-3"**	**19'-11"**	26'-5"	**24'-7"**	**21'-2"**	**16'-11"**
	16"	26'-10"	**24'-10"**	**23'-7"**	**21'-8"**	28'-2"	**26'-1"**	**22'-5"**	**17'-11"**	27'-5"	**25'-6"**	**24'-3"**	**21'-8"**	28'-10"	**26'-9"**	**22'-5"**	**17'-11"**
	18"	28'-6"	26'-5"	**25'-2"**	**23'-4"**	30'-0"	**27'-10"**	**25'-6"**	**20'-4"**	29'-2"	**27'-2"**	**25'-10"**	**23'-4"**	30'-9"	**28'-7"**	**25'-6"**	**20'-4"**
	20"	30'-6"	**28'-3"**	**26'-10"**	**24'-7"**	32'-2"	**29'-9"**	**26'-3"**	**20'-11"**	31'-2"	**29'-0"**	**27'-6"**	**24'-7"**	**33'-3"**	**30'-2"**	**26'-3"**	**20'-11"**
	24"	34'-11"	**31'-8"**	**30'-0"**	**26'-10"**	**37'-5"**	**31'-8"**	**26'-4"**	**21'-0"**	**36'-0"**	**32'-9"**	**30'-0"**	**26'-10"**	**38'-0"**	**31'-8"**	**26'-4"**	**21'-0"**
PWI 52S, LPI 52Plus	**11-7/8"**	22'-9"	21'-1"	20'-1"	**18'-10"**	23'-10"	22'-1"	**21'-0"**	**19'-0"**	23'-3"	21'-7"	20'-4"	**18'-10"**	24'-4"	22'-8"	**21'-6"**	**19'-0"**
	14"	25'-3"	23'-5"	**22'-3"**	**20'-11"**	26'-6"	**24'-6"**	**23'-4"**	**20'-3"**	25'-9"	23'-11"	**22'-10"**	**21'-5"**	27'-1"	**25'-2"**	**23'-11"**	**20'-3"**
	16"	27'-6"	25'-5"	**24'-2"**	**22'-9"**	28'-10"	**26'-8"**	**25'-5"**	**21'-1"**	28'-1"	**26'-1"**	**24'-10"**	**23'-4"**	29'-5"	**27'-4"**	**26'-1"**	**21'-1"**
PWI 56L, LPI 56	**11-7/8"**	23'-3"	**21'-6"**	**20'-5"**	**19'-3"**	24'-4"	**22'-7"**	**21'-5"**	**18'-4"**	23'-8"	**22'-0"**	**20'-10"**	**19'-4"**	24'-10"	**23'-1"**	**21'-11"**	**18'-4"**
	14"	25'-9"	**23'-10"**	**22'-8"**	**21'-3"**	27'-0"	**25'-0"**	**23'-9"**	**19'-3"**	26'-3"	**24'-4"**	**23'-2"**	**21'-6"**	27'-7"	**25'-7"**	**24'-2"**	**19'-3"**
	16"	27'-11"	**25'-10"**	**24'-7"**	**22'-9"**	29'-4"	**27'-2"**	**25'-3"**	**20'-2"**	**28'-6"**	**26'-6"**	**25'-2"**	**22'-9"**	**30'-0"**	**27'-10"**	**25'-3"**	**20'-2"**
	18"	30'-0"	**27'-9"**	**26'-4"**	**24'-9"**	**31'-7"**	**29'-3"**	**26'-5"**	**21'-1"**	30'-7"	**28'-4"**	**27'-0"**	**25'-5"**	**32'-5"**	**29'-11"**	**26'-5"**	**21'-1"**
	24"	**37'-1"**	**33'-5"**	**31'-4"**	**29'-5"**	**39'-9"**	**33'-2"**	**27'-7"**	**22'-0"**	**38'-1"**	**34'-7"**	**32'-4"**	**30'-4"**	**40'-11"**	**33'-2"**	**27'-7"**	**22'-0"**

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA 0325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where **bold**. For spans in **bold**, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

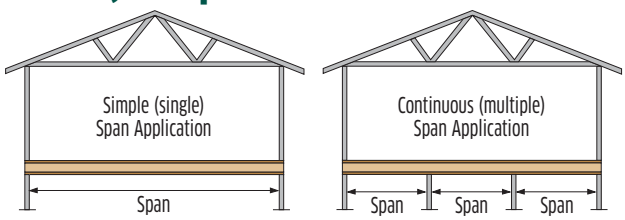
Floor Span Tables: 7/8 OSB Sheathing

Specified Floor Loads: 100 psf Live Load, 35 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



100 PSF LIVE LOAD, 35 PSF DEAD LOAD: 7/8" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	9-1/2"	12'-8"	11'-6"	10'-9"	9'-1"	13'-8"	11'-4"	9'-5"	7'-6"	12'-8"	11'-6"	10'-9"	9'-1"	13'-8"	11'-4"	9'-5"	7'-6"
	11-7/8"	15'-1"	13'-8"	12'-6"	10'-3"	15'-10"	12'-1"	10'-0"	8'-0"	15'-1"	13'-8"	12'-6"	10'-3"	15'-10"	12'-1"	10'-0"	8'-0"
	14"	17'-3"	14'-11"	13'-7"	11'-3"	17'-1"	12'-9"	10'-7"	8'-5"	17'-3"	14'-11"	13'-7"	11'-3"	17'-1"	12'-9"	10'-7"	8'-5"
	16"	18'-5"	16'-0"	14'-7"	12'-2"	18'-0"	13'-5"	11'-2"	8'-10"	18'-5"	16'-0"	14'-7"	12'-2"	18'-0"	13'-5"	11'-2"	8'-10"
PWI 32S, LPI 32Plus	9-1/2"	13'-3"	12'-0"	11'-4"	9'-1"	14'-4"	11'-4"	9'-5"	7'-6"	13'-3"	12'-0"	11'-4"	9'-1"	14'-4"	11'-4"	9'-5"	7'-6"
	11-7/8"	15'-10"	14'-4"	12'-10"	10'-3"	16'-2"	12'-1"	10'-0"	8'-0"	15'-10"	14'-4"	12'-10"	10'-3"	16'-2"	12'-1"	10'-0"	8'-0"
	14"	18'-0"	16'-3"	14'-2"	11'-3"	17'-1"	12'-9"	10'-7"	8'-5"	18'-0"	16'-3"	14'-2"	11'-3"	17'-1"	12'-9"	10'-7"	8'-5"
	16"	19'-11"	17'-6"	15'-3"	12'-2"	18'-0"	13'-5"	11'-2"	8'-10"	19'-11"	17'-6"	15'-3"	12'-2"	18'-0"	13'-5"	11'-2"	8'-10"
PWI 36L, LPI 36	11-7/8"	16'-6"	14'-11"	14'-0"	11'-7"	17'-11"	14'-1"	11'-8"	9'-4"	16'-6"	14'-11"	14'-0"	11'-7"	17'-11"	14'-1"	11'-8"	9'-4"
	14"	18'-8"	16'-11"	14'-7"	11'-7"	18'-10"	14'-1"	11'-8"	9'-4"	18'-8"	16'-11"	14'-7"	11'-7"	18'-10"	14'-1"	11'-8"	9'-4"
	16"	20'-8"	17'-7"	14'-7"	11'-7"	18'-10"	14'-1"	11'-8"	9'-4"	20'-8"	17'-7"	14'-7"	11'-7"	18'-10"	14'-1"	11'-8"	9'-4"
	18"	22'-5"	20'-4"	17'-10"	14'-2"	18'-10"	14'-0"	11'-8"	9'-3"	22'-5"	20'-4"	17'-10"	14'-2"	18'-10"	14'-0"	11'-8"	9'-3"
PWI 42S, LPI 42Plus	9-1/2"	14'-11"	13'-6"	12'-8"	10'-7"	16'-1"	13'-1"	10'-11"	8'-9"	14'-11"	13'-6"	12'-8"	10'-7"	16'-1"	13'-1"	10'-11"	8'-9"
	11-7/8"	17'-9"	16'-1"	15'-1"	12'-1"	19'-3"	15'-10"	13'-3"	10'-7"	17'-9"	16'-1"	15'-1"	12'-1"	19'-3"	15'-10"	13'-3"	10'-7"
	14"	20'-3"	18'-4"	16'-9"	13'-4"	21'-11"	17'-2"	14'-3"	11'-4"	20'-3"	18'-4"	16'-9"	13'-4"	21'-11"	17'-2"	14'-3"	11'-4"
	16"	22'-5"	20'-4"	18'-4"	14'-7"	24'-4"	18'-2"	15'-2"	12'-1"	22'-5"	20'-4"	18'-4"	14'-7"	24'-4"	18'-2"	15'-2"	12'-1"
	18"	24'-2"	21'-11"	20'-8"	18'-4"	26'-4"	20'-8"	17'-2"	13'-8"	24'-2"	21'-11"	20'-8"	18'-4"	26'-4"	20'-8"	17'-2"	13'-8"
	20"	26'-2"	23'-9"	22'-4"	19'-6"	28'-5"	21'-3"	17'-8"	14'-1"	26'-2"	23'-9"	22'-4"	19'-6"	28'-5"	21'-3"	17'-8"	14'-1"
	24"	30'-0"	27'-1"	24'-8"	21'-7"	28'-7"	21'-4"	17'-9"	14'-2"	30'-0"	27'-1"	24'-8"	21'-7"	28'-7"	21'-4"	17'-9"	14'-2"
PWI 52S, LPI 52Plus	11-7/8"	18'-6"	16'-9"	15'-9"	14'-7"	20'-1"	18'-2"	16'-1"	12'-9"	18'-6"	16'-9"	15'-9"	14'-7"	20'-1"	18'-2"	16'-1"	12'-9"
	14"	20'-11"	19'-0"	17'-10"	16'-0"	22'-9"	20'-7"	17'-1"	13'-8"	20'-11"	19'-0"	17'-10"	16'-0"	22'-9"	20'-7"	17'-1"	13'-8"
	16"	23'-2"	21'-0"	19'-9"	17'-3"	25'-2"	21'-5"	17'-9"	14'-2"	23'-2"	21'-0"	19'-9"	17'-3"	25'-2"	21'-5"	17'-9"	14'-2"
PWI 56L, LPI 56	11-7/8"	18'-11"	17'-1"	16'-1"	13'-6"	20'-6"	18'-6"	15'-6"	12'-4"	18'-11"	17'-1"	16'-1"	13'-6"	20'-6"	18'-6"	15'-6"	12'-4"
	14"	21'-5"	19'-5"	18'-2"	14'-5"	23'-3"	19'-7"	16'-3"	13'-0"	21'-5"	19'-5"	18'-2"	14'-5"	23'-3"	19'-7"	16'-3"	13'-0"
	16"	23'-8"	21'-5"	19'-2"	15'-3"	25'-9"	20'-6"	17'-0"	13'-7"	23'-8"	21'-5"	19'-2"	15'-3"	25'-9"	20'-6"	17'-0"	13'-7"
	18"	25'-9"	23'-4"	21'-10"	18'-3"	28'-0"	21'-5"	17'-9"	14'-2"	25'-9"	23'-4"	21'-10"	18'-3"	28'-0"	21'-5"	17'-9"	14'-2"
	24"	31'-10"	28'-9"	27'-0"	22'-1"	29'-11"	22'-4"	18'-7"	14'-10"	31'-10"	28'-9"	27'-0"	22'-1"	29'-11"	22'-4"	18'-7"	14'-10"

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA O325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
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9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

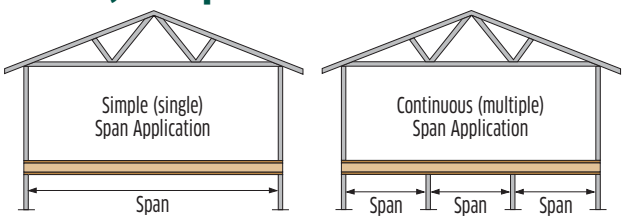
Floor Span Tables: 7/8 OSB Sheathing

Specified Floor Loads: 100 psf Live Load, 45 psf Dead Load

Table Usage:

1. Select the appropriate table based on the floor system construction.
2. Select the Simple Span or Continuous Span section of the table, as required.
3. Find a span that meets or exceeds the required clear span.
4. Read the corresponding joist series, depth and spacing.

Caution: For floor systems that require both Simple Span and Continuous Span joists, it is a good idea to check both before selecting a joist. Some conditions are controlled by Continuous Span rather than Simple Span.



100 PSF LIVE LOAD, 45 PSF DEAD LOAD: 7/8" OSB SHEATHING, GLUED & NAILED

Series	Depth	No Direct Attached Ceiling								Direct Attached 1/2" Gypsum Ceiling							
		Maximum Simple Spans				Maximum Continuous Spans				Maximum Simple Spans				Maximum Continuous Spans			
		12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc	12" oc	16" oc	19.2" oc	24" oc
PWI 20S, LPI 20Plus	9-1/2"	12'-8"	11'-6"	10'-6"	8'-6"	13'-3"	10'-8"	8'-10"	7'-0"	12'-8"	11'-6"	10'-6"	8'-6"	13'-3"	10'-8"	8'-10"	7'-0"
	11-7/8"	15'-1"	13'-4"	12'-1"	9'-7"	15'-3"	11'-4"	9'-5"	7'-6"	15'-1"	13'-4"	12'-1"	9'-7"	15'-3"	11'-4"	9'-5"	7'-6"
	14"	16'-8"	14'-5"	13'-2"	10'-7"	16'-1"	12'-0"	9'-11"	7'-11"	16'-8"	14'-5"	13'-2"	10'-7"	16'-1"	12'-0"	9'-11"	7'-11"
	16"	17'-11"	15'-6"	14'-1"	11'-5"	16'-10"	12'-7"	10'-5"	8'-4"	17'-11"	15'-6"	14'-1"	11'-5"	16'-10"	12'-7"	10'-5"	8'-4"
PWI 32S, LPI 32Plus	9-1/2"	13'-3"	12'-0"	10'-8"	8'-6"	14'-4"	10'-8"	8'-10"	7'-0"	13'-3"	12'-0"	10'-8"	8'-6"	14'-4"	10'-8"	8'-10"	7'-0"
	11-7/8"	15'-10"	14'-4"	12'-1"	9'-7"	15'-3"	11'-4"	9'-5"	7'-6"	15'-10"	14'-4"	12'-1"	9'-7"	15'-3"	11'-4"	9'-5"	7'-6"
	14"	18'-0"	15'-9"	13'-3"	10'-7"	16'-1"	12'-0"	9'-11"	7'-11"	18'-0"	15'-9"	13'-3"	10'-7"	16'-1"	12'-0"	9'-11"	7'-11"
	16"	19'-7"	16'-11"	14'-4"	11'-5"	16'-10"	12'-7"	10'-5"	8'-4"	19'-7"	16'-11"	14'-4"	11'-5"	16'-10"	12'-7"	10'-5"	8'-4"
PWI 36L, LPI 36	11-7/8"	16'-6"	14'-11"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"	16'-6"	14'-11"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"
	14"	18'-8"	16'-6"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"	18'-8"	16'-6"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"
	16"	20'-8"	16'-6"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"	20'-8"	16'-6"	13'-8"	10'-10"	17'-8"	13'-2"	10'-11"	8'-9"
	18"	22'-5"	20'-2"	16'-9"	13'-4"	17'-8"	13'-2"	10'-11"	8'-8"	22'-5"	20'-2"	16'-9"	13'-4"	17'-8"	13'-2"	10'-11"	8'-8"
PWI 42S, LPI 42Plus	9-1/2"	14'-11"	13'-6"	12'-6"	9'-11"	16'-1"	12'-3"	10'-3"	8'-2"	14'-11"	13'-6"	12'-6"	9'-11"	16'-1"	12'-3"	10'-3"	8'-2"
	11-7/8"	17'-9"	16'-1"	14'-3"	11'-4"	19'-3"	14'-11"	12'-5"	9'-11"	17'-9"	16'-1"	14'-3"	11'-4"	19'-3"	14'-11"	12'-5"	9'-11"
	14"	20'-3"	18'-4"	15'-9"	12'-6"	21'-7"	16'-1"	13'-5"	10'-8"	20'-3"	18'-4"	15'-9"	12'-6"	21'-7"	16'-1"	13'-5"	10'-8"
	16"	22'-5"	20'-4"	17'-2"	13'-8"	22'-10"	17'-1"	14'-2"	11'-4"	22'-5"	20'-4"	17'-2"	13'-8"	22'-10"	17'-1"	14'-2"	11'-4"
	18"	24'-2"	21'-11"	20'-8"	17'-2"	25'-11"	19'-5"	16'-1"	12'-10"	24'-2"	21'-11"	20'-8"	17'-2"	25'-11"	19'-5"	16'-1"	12'-10"
	20"	26'-2"	23'-9"	21'-11"	18'-3"	26'-8"	19'-11"	16'-7"	13'-2"	26'-2"	23'-9"	21'-11"	18'-3"	26'-8"	19'-11"	16'-7"	13'-2"
	24"	30'-0"	26'-3"	23'-11"	20'-3"	26'-10"	20'-0"	16'-8"	13'-3"	30'-0"	26'-3"	23'-11"	20'-3"	26'-10"	20'-0"	16'-8"	13'-3"
PWI 52S, LPI 52Plus	11-7/8"	18'-6"	16'-9"	15'-9"	13'-9"	20'-1"	18'-1"	15'-1"	12'-0"	18'-6"	16'-9"	15'-9"	13'-9"	20'-1"	18'-1"	15'-1"	12'-0"
	14"	20'-11"	19'-0"	17'-10"	15'-0"	22'-9"	19'-4"	16'-1"	12'-10"	20'-11"	19'-0"	17'-10"	15'-0"	22'-9"	19'-4"	16'-1"	12'-10"
	16"	23'-2"	21'-0"	19'-9"	16'-2"	25'-2"	20'-1"	16'-8"	13'-4"	23'-2"	21'-0"	19'-9"	16'-2"	25'-2"	20'-1"	16'-8"	13'-4"
PWI 56L, LPI 56	11-7/8"	18'-11"	17'-1"	15'-11"	12'-8"	20'-6"	17'-6"	14'-6"	11'-7"	18'-11"	17'-1"	15'-11"	12'-8"	20'-6"	17'-6"	14'-6"	11'-7"
	14"	21'-5"	19'-5"	17'-0"	13'-6"	23'-3"	18'-4"	15'-3"	12'-2"	21'-5"	19'-5"	17'-0"	13'-6"	23'-3"	18'-4"	15'-3"	12'-2"
	16"	23'-8"	21'-5"	18'-0"	14'-4"	25'-9"	19'-3"	16'-0"	12'-9"	23'-8"	21'-5"	18'-0"	14'-4"	25'-9"	19'-3"	16'-0"	12'-9"
	18"	25'-9"	23'-4"	21'-6"	17'-2"	26'-10"	20'-1"	16'-8"	13'-3"	25'-9"	23'-4"	21'-6"	17'-2"	26'-10"	20'-1"	16'-8"	13'-3"
	24"	31'-10"	28'-9"	26'-0"	20'-9"	28'-1"	21'-0"	17'-5"	13'-11"	31'-10"	28'-9"	26'-0"	20'-9"	28'-1"	21'-0"	17'-5"	13'-11"

Notes:

1. Joist spans have been calculated in accordance with CSA 086 for the specified uniform floor loads listed. Concentrated load cases, where required, shall be evaluated by the designer.
2. The spans listed are the clear distance between supports. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists.
3. Vibration has been checked in accordance with CSA 086-19: A.5.4.5.2.b with glued & nailed floor sheathing, with or without a direct attached 1/2" gypsum ceiling, as indicated in the table.
4. The floor sheathing shall be 1F24 rated OSB conforming to CSA 0325 and shall be glued to the joists with an elastomeric adhesive conforming to CGSB Standard CAN-CGSB-71.26-M88.
5. Uniform load deflection is limited to the following: L/480 on live load and L/240 on total load based on composite action with the glued floor sheathing. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners are not required for the spans in these tables except where bold. For spans in bold, web stiffeners shall be installed at all supports.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide lateral support at points of bearing to prevent twisting of joists.
10. Use in dry service conditions only.
11. For conditions not covered or for additional information contact your PWT distributor.

UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

Roof Span Tables: Low Pitch (6:12 or less)

25 and 30 psf Load

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 25 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	18'-11"	17'-6"	15'-7"
	11-7/8"	22'-3"	20'-3"	18'-1"
	14"	24'-1"	21'-11"	19'-7"
	16"	25'-10"	23'-6"	20'-10"
PWI 32S, LPI 32Plus	9-1/2"	20'-1"	18'-10"	17'-1"
	11-7/8"	23'-11"	21'-9"	19'-6"
	14"	26'-3"	23'-11"	20'-9"
	16"	28'-3"	25'-9"	20'-10"
PWI 36L, LPI 36	11-7/8"	25'-1"	23'-6"	21'-9"
	14"	28'-5"	26'-8"	22'-1"
	16"	31'-5"	27'-10"	22'-2"
	18"	**34'-2"**	**32'-1"**	**26'-7"**
PWI 42S, LPI 42Plus	9-1/2"	22'-9"	21'-4"	19'-9"
	11-7/8"	27'-3"	25'-6"	23'-8"
	14"	30'-11"	29'-1"	26'-11"
	16"	34'-4"	32'-3"	28'-11"
	18"	**36'-9"**	**34'-6"**	**31'-1"**
	20"	**39'-10"**	**36'-8"**	**32'-9"**
	24"	**43'-10"**	**40'-0"**	**35'-9"**
PWI 52S, LPI 52Plus	11-7/8"	28'-2"	26'-5"	24'-5"
	14"	31'-11"	30'-0"	27'-9"
	16"	35'-4"	33'-3"	30'-8"
PWI 56L, LPI 56	11-7/8"	29'-1"	27'-4"	24'-9"
	14"	33'-0"	30'-11"	24'-10"
	16"	36'-5"	31'-2"	24'-10"
	18"	**39'-8"**	**37'-2"**	**34'-5"**
	24"	**48'-10"**	**45'-10"**	**42'-3"**

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 30 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	18'-4"	16'-10"	15'-0"
	11-7/8"	21'-5"	19'-6"	17'-5"
	14"	23'-2"	21'-2"	18'-11"
	16"	24'-10"	22'-8"	19'-4"
PWI 32S, LPI 32Plus	9-1/2"	19'-6"	18'-3"	16'-5"
	11-7/8"	23'-0"	21'-0"	18'-9"
	14"	25'-3"	23'-1"	19'-3"
	16"	27'-3"	24'-3"	19'-4"
PWI 36L, LPI 36	11-7/8"	24'-4"	22'-10"	20'-5"
	14"	27'-7"	25'-7"	20'-5"
	16"	30'-6"	25'-7"	20'-5"
	18"	**33'-2"**	**30'-0"**	**24'-0"**
PWI 42S, LPI 42Plus	9-1/2"	22'-1"	20'-9"	19'-2"
	11-7/8"	26'-5"	24'-9"	22'-11"
	14"	30'-1"	28'-2"	25'-9"
	16"	33'-4"	31'-4"	26'-7"
	18"	**35'-8"**	**33'-6"**	**30'-0"**
	20"	**38'-8"**	**35'-4"**	**31'-6"**
	24"	**42'-3"**	**38'-6"**	**34'-5"**
PWI 52S, LPI 52Plus	11-7/8"	27'-4"	25'-8"	23'-9"
	14"	31'-0"	29'-1"	26'-11"
	16"	34'-4"	32'-3"	28'-4"
PWI 56L, LPI 56	11-7/8"	28'-3"	26'-6"	23'-0"
	14"	32'-0"	28'-10"	23'-0"
	16"	34'-9"	28'-11"	23'-1"
	18"	**38'-6"**	**36'-1"**	**33'-5"**
	24"	**47'-5"**	**44'-6"**	**38'-1"**

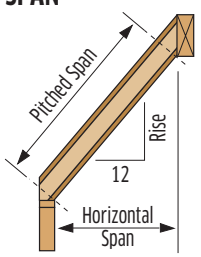
Table Usage:

1. Select the appropriate set of tables based on roof pitch.
2. Select the section of that table that corresponds to the specified roof live or snow load.
3. Find a span that meets or exceeds the design span.
4. Read the corresponding series, depth and spacing.

Notes:

1. Joist spans have been calculated in accordance with CSA O86 for the specified uniform snow and dead loads shown. These spans have not been evaluated for wind, snow drift or concentrated loads. The designer shall evaluate all required conditions.
2. The spans listed are the horizontal clear distance between supports and are valid for simple or continuous span applications. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table on page 17 to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists due solely to gravity loads. Uplift due to wind may require additional restraint.
3. Uniform load deflection is limited to the following: L/360 on live load and L/180 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
4. For deflection, the specified snow loads are reduced by the serviceability limit states Importance Factor (IS = 0.9).
5. These tables do not reflect any additional stiffness provided by the roof sheathing.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners shall be installed at all supports for joists 18" and deeper (shown in **bold**) and for all depths when using a "bird's mouth" detail.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide continuous lateral support for compression flange. Provide lateral support at points of bearing to prevent twisting of the joist.
10. Roof joists shall have a minimum pitch of 1/4" per foot (1/4:12) for positive drainage.
11. Roof applications in high wind areas require special analysis which may reduce spans and require special connectors to resist uplift.
12. Use in dry service conditions only.
13. For conditions not covered or for additional information contact your PWT distributor.

ROOF JOIST SPAN



ACTUAL DEFLECTION BASED ON SPAN AND LIMIT

Span (ft)	L/360	L/240	L/180
10'	5/16"	1/2"	11/16"
12'	3/8"	5/8"	13/16"
14'	7/16"	11/16"	15/16"
16'	9/16"	13/16"	1-1/16"
18'	5/8"	7/8"	1-3/16"
20'	11/16"	1"	1-5/16"
22'	3/4"	1-1/8"	1-7/16"
24'	13/16"	1-3/16"	1-5/8"
26'	7/8"	1-5/16"	1-3/4"
28'	15/16"	1-3/8"	1-7/8"
30'	1"	1-1/2"	2"

* Deflections rounded to the nearest 1/16."

Roof Span Tables: Low Pitch (6:12 or less)
40 and 60 psf Load

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 40 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	16'-8"	15'-5"	13'-9"
	11-7/8"	19'-7"	17'-11"	15'-11"
	14"	21'-3"	19'-5"	16'-2"
	16"	22'-9"	20'-4"	16'-3"
PWI 32S, LPI 32Plus	9-1/2"	17'-8"	16'-7"	14'-11"
	11-7/8"	21'-1"	19'-3"	15'-11"
	14"	23'-2"	20'-4"	16'-2"
	16"	24'-6"	20'-4"	16'-3"
PWI 36L, LPI 36	11-7/8"	22'-2"	20'-9"	17'-0"
	14"	25'-1"	21'-4"	17'-0"
	16"	25'-8"	21'-4"	17'-0"
	18"	**30'-1"**	**25'-1"**	**20'-0"**
PWI 42S, LPI 42Plus	9-1/2"	20'-1"	18'-10"	17'-5"
	11-7/8"	24'-0"	22'-7"	20'-8"
	14"	27'-4"	25'-8"	21'-6"
	16"	30'-4"	27'-10"	22'-2"
	18"	**32'-6"**	**30'-6"**	**27'-6"**
	20"	**35'-3"**	**32'-4"**	**28'-11"**
	24"	**38'-9"**	**35'-4"**	**30'-4"**
PWI 52S, LPI 52Plus	11-7/8"	24'-11"	23'-4"	21'-7"
	14"	28'-3"	26'-6"	23'-5"
	16"	31'-3"	29'-4"	23'-7"
PWI 56L, LPI 56	11-7/8"	25'-8"	24'-1"	19'-4"
	14"	29'-2"	24'-3"	19'-4"
	16"	29'-3"	24'-4"	19'-4"
	18"	**35'-0"**	**32'-10"**	**30'-5"**
	24"	**43'-2"**	**39'-9"**	**31'-9"**

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 60 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	14'-6"	13'-5"	11'-2"
	11-7/8"	17'-1"	14'-11"	11'-11"
	14"	18'-6"	15'-4"	12'-2"
	16"	18'-7"	15'-5"	12'-3"
PWI 32S, LPI 32Plus	9-1/2"	15'-4"	14'-0"	11'-2"
	11-7/8"	18'-0"	14'-11"	11'-11"
	14"	18'-6"	15'-4"	12'-2"
	16"	18'-7"	15'-5"	12'-3"
PWI 36L, LPI 36	11-7/8"	19'-2"	16'-0"	12'-9"
	14"	19'-3"	16'-0"	12'-9"
	16"	19'-3"	16'-0"	12'-9"
	18"	**22'-7"**	**18'-9"**	**15'-0"**
PWI 42S, LPI 42Plus	9-1/2"	17'-5"	16'-4"	13'-11"
	11-7/8"	20'-10"	19'-5"	15'-6"
	14"	23'-9"	20'-2"	16'-1"
	16"	25'-1"	20'-10"	16'-8"
	18"	**28'-3"**	**26'-6"**	**22'-0"**
	20"	**30'-7"**	**28'-2"**	**22'-8"**
	24"	**33'-9"**	**28'-6"**	**22'-9"**
PWI 52S, LPI 52Plus	11-7/8"	21'-7"	20'-3"	17'-4"
	14"	24'-6"	22'-1"	17'-8"
	16"	26'-8"	22'-2"	17'-9"
PWI 56L, LPI 56	11-7/8"	22'-1"	18'-4"	14'-7"
	14"	22'-1"	18'-4"	14'-7"
	16"	22'-1"	18'-5"	14'-8"
	18"	**30'-5"**	**28'-6"**	**22'-10"**
	24"	**35'-11"**	**29'-10"**	**23'-10"**

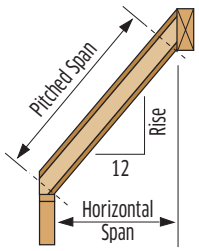
Table Usage:

1. Select the appropriate set of tables based on roof pitch.
2. Select the section of that table that corresponds to the specified roof live or snow load.
3. Find a span that meets or exceeds the design span.
4. Read the corresponding series, depth and spacing.

Notes:

1. Joist spans have been calculated in accordance with CSA O86 for the specified uniform snow and dead loads shown. These spans have not been evaluated for wind, snow drift or concentrated loads. The designer shall evaluate all required conditions.
2. The spans listed are the horizontal clear distance between supports and are valid for simple or continuous span applications. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists due solely to gravity loads. Uplift due to wind may require additional restraint.
3. Uniform load deflection is limited to the following: L/360 on live load and L/180 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
4. For deflection, the specified snow loads are reduced by the serviceability limit states Importance Factor (IS = 0.9).
5. These tables do not reflect any additional stiffness provided by the roof sheathing.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners shall be installed at all supports for joists 18" and deeper (shown in **bold**) and for all depths when using a "bird's mouth" detail.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide continuous lateral support for compression flange. Provide lateral support at points of bearing to prevent twisting of the joist.
10. Roof joists shall have a minimum pitch of 1/4" per foot (1/4:12) for positive drainage.
11. Roof applications in high wind areas require special analysis which may reduce spans and require special connectors to resist uplift.
12. Use in dry service conditions only.
13. For conditions not covered or for additional information contact your PWT distributor.

ROOF JOIST SPAN



UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

Roof Span Tables: High Pitch (6:12 to 12:12)

25 and 30 psf Load

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 25 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	16'-9"	15'-9"	14'-3"
	11-7/8"	20'-1"	18'-7"	16'-7"
	14"	22'-1"	20'-1"	17'-5"
	16"	23'-8"	21'-7"	17'-6"
PWI 32S, LPI 32Plus	9-1/2"	17'-9"	16'-8"	15'-5"
	11-7/8"	21'-3"	19'-11"	17'-4"
	14"	24'-0"	21'-10"	17'-5"
	16"	25'-11"	21'-11"	17'-6"
PWI 36L, LPI 36	11-7/8"	22'-2"	20'-10"	18'-6"
	14"	25'-2"	23'-3"	18'-6"
	16"	27'-10"	23'-4"	18'-7"
	18"	**30'-3"**	**28'-5"**	**26'-3"**
PWI 42S, LPI 42Plus	9-1/2"	20'-2"	18'-11"	17'-6"
	11-7/8"	24'-1"	22'-8"	20'-11"
	14"	27'-5"	25'-9"	23'-5"
	16"	30'-5"	28'-7"	24'-3"
	18"	**32'-6"**	**30'-7"**	**28'-4"**
	20"	**35'-3"**	**33'-1"**	**30'-0"**
	24"	**40'-2"**	**36'-8"**	**32'-9"**
PWI 52S, LPI 52Plus	11-7/8"	24'-11"	23'-5"	21'-8"
	14"	28'-3"	26'-7"	24'-7"
	16"	31'-4"	29'-5"	25'-9"
PWI 56L, LPI 56	11-7/8"	25'-9"	24'-2"	20'-9"
	14"	29'-2"	26'-1"	20'-10"
	16"	31'-5"	26'-2"	20'-10"
	18"	**35'-1"**	**32'-11"**	**30'-6"**
	24"	**43'-3"**	**40'-7"**	**37'-7"**

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 30 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	16'-4"	15'-4"	14'-0"
	11-7/8"	19'-7"	18'-2"	16'-2"
	14"	21'-6"	19'-8"	16'-7"
	16"	23'-1"	20'-11"	16'-8"
PWI 32S, LPI 32Plus	9-1/2"	17'-4"	16'-3"	15'-0"
	11-7/8"	20'-8"	19'-5"	16'-6"
	14"	23'-6"	20'-10"	16'-7"
	16"	25'-2"	20'-11"	16'-8"
PWI 36L, LPI 36	11-7/8"	21'-8"	20'-4"	17'-8"
	14"	24'-6"	22'-2"	17'-8"
	16"	26'-9"	22'-3"	17'-9"
	18"	**29'-6"**	**27'-8"**	**25'-7"**
PWI 42S, LPI 42Plus	9-1/2"	19'-7"	18'-5"	17'-0"
	11-7/8"	23'-6"	22'-1"	20'-5"
	14"	26'-9"	25'-1"	22'-4"
	16"	29'-8"	27'-10"	23'-1"
	18"	**31'-8"**	**29'-9"**	**27'-7"**
	20"	**34'-4"**	**32'-3"**	**29'-4"**
	24"	**39'-3"**	**35'-9"**	**32'-0"**
PWI 52S, LPI 52Plus	11-7/8"	24'-3"	22'-10"	21'-1"
	14"	27'-7"	25'-11"	24'-0"
	16"	30'-6"	28'-8"	24'-7"
PWI 56L, LPI 56	11-7/8"	25'-1"	23'-7"	19'-10"
	14"	28'-5"	24'-11"	19'-10"
	16"	30'-0"	24'-11"	19'-11"
	18"	**34'-2"**	**32'-1"**	**29'-9"**
	24"	**42'-1"**	**39'-7"**	**36'-8"**

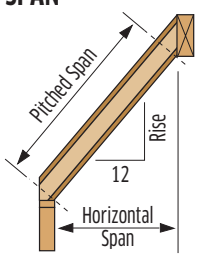
Table Usage:

1. Select the appropriate set of tables based on roof pitch.
2. Select the section of that table that corresponds to the specified roof live or snow load.
3. Find a span that meets or exceeds the design span.
4. Read the corresponding series, depth and spacing.

Notes:

1. Joist spans have been calculated in accordance with CSA O86 for the specified uniform snow and dead loads shown. These spans have not been evaluated for wind, snow drift or concentrated loads. The designer shall evaluate all required conditions.
2. The spans listed are the horizontal clear distance between supports and are valid for simple or continuous span applications. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table on page 19 to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists due solely to gravity loads. Uplift due to wind may require additional restraint.
3. Uniform load deflection is limited to the following: L/360 on live load and L/180 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
4. For deflection, the specified snow loads are reduced by the serviceability limit states Importance Factor (IS = 0.9).
5. These tables do not reflect any additional stiffness provided by the roof sheathing.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners shall be installed at all supports for joists 18" and deeper (shown in bold) and for all depths when using a "bird's mouth" detail.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide continuous lateral support for compression flange. Provide lateral support at points of bearing to prevent twisting of the joist.
10. Roof joists shall have a minimum pitch of 1/4" per foot (1/4:12) for positive drainage.
11. Roof applications in high wind areas require special analysis which may reduce spans and require special connectors to resist uplift.
12. Use in dry service conditions only.
13. For conditions not covered or for additional information contact your PWT distributor.

ROOF JOIST SPAN



ACTUAL DEFLECTION BASED ON SPAN AND LIMIT

Span (ft)	L/360	L/240	L/180
10'	5/16"	1/2"	11/16"
12'	3/8"	5/8"	13/16"
14'	7/16"	11/16"	15/16"
16'	9/16"	13/16"	1-1/16"
18'	5/8"	7/8"	1-3/16"
20'	11/16"	1"	1-5/16"
22'	3/4"	1-1/8"	1-7/16"
24'	13/16"	1-3/16"	1-5/8"
26'	7/8"	1-5/16"	1-3/4"
28'	15/16"	1-3/8"	1-7/8"
30'	1"	1-1/2"	2"

* Deflections rounded to the nearest 1/16."

Roof Span Tables: High Pitch (6:12 to 12:12)

40 and 60 psf Load

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 40 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	15'-6"	14'-7"	13'-2"
	11-7/8"	18'-8"	17'-1"	14'-8"
	14"	20'-3"	18'-6"	14'-8"
	16"	21'-9"	18'-6"	14'-9"
PWI 32S, LPI 32Plus	9-1/2"	16'-6"	15'-5"	14'-3"
	11-7/8"	19'-8"	18'-4"	14'-8"
	14"	22'-1"	18'-6"	14'-8"
	16"	22'-4"	18'-6"	14'-9"
PWI 36L, LPI 36	11-7/8"	20'-7"	19'-4"	15'-7"
	14"	23'-4"	19'-8"	15'-8"
	16"	23'-9"	19'-9"	15'-9"
	18"	**28'-0"**	**26'-4"**	**21'-7"**
PWI 42S, LPI 42Plus	9-1/2"	18'-8"	17'-6"	16'-2"
	11-7/8"	22'-4"	21'-0"	19'-1"
	14"	25'-5"	23'-10"	19'-10"
	16"	28'-2"	25'-8"	20'-6"
	18"	**30'-2"**	**28'-4"**	**26'-2"**
	20"	**32'-8"**	**30'-8"**	**27'-7"**
	24"	**36'-11"**	**33'-8"**	**30'-1"**
PWI 52S, LPI 52Plus	11-7/8"	23'-1"	21'-8"	20'-1"
	14"	26'-3"	24'-8"	21'-4"
	16"	29'-0"	27'-3"	21'-9"
PWI 56L, LPI 56	11-7/8"	23'-11"	22'-0"	17'-7"
	14"	26'-7"	22'-1"	17'-7"
	16"	26'-7"	22'-1"	17'-7"
	18"	**32'-6"**	**30'-7"**	**28'-3"**
	24"	**40'-1"**	**37'-8"**	**34'-4"**

SPECIFIED ROOF SNOW LOAD (STANDARD DURATION) – 60 PSF

Series	Depth	16" oc	19.2" oc	24" oc
		Specified Dead Load → 25 psf		
PWI 20S, LPI 20Plus	9-1/2"	13'-6"	12'-8"	11'-3"
	11-7/8"	16'-2"	14'-2"	11'-3"
	14"	17'-2"	14'-3"	11'-4"
	16"	17'-3"	14'-4"	11'-5"
PWI 32S, LPI 32Plus	9-1/2"	14'-3"	13'-5"	11'-3"
	11-7/8"	17'-1"	14'-2"	11'-3"
	14"	17'-2"	14'-3"	11'-4"
	16"	17'-3"	14'-4"	11'-5"
PWI 36L, LPI 36	11-7/8"	17'-11"	15'-2"	12'-1"
	14"	18'-4"	15'-2"	12'-1"
	16"	18'-4"	15'-3"	12'-2"
	18"	**24'-4"**	**20'-6"**	**16'-4"**
PWI 42S, LPI 42Plus	9-1/2"	16'-2"	15'-2"	13'-9"
	11-7/8"	19'-5"	18'-2"	14'-9"
	14"	22'-1"	19'-2"	15'-4"
	16"	23'-11"	19'-10"	15'-10"
	18"	**26'-3"**	**24'-8"**	**22'-9"**
	20"	**28'-5"**	**26'-8"**	**24'-3"**
	24"	**32'-6"**	**29'-8"**	**24'-11"**
PWI 52S, LPI 52Plus	11-7/8"	20'-1"	18'-10"	16'-2"
	14"	22'-10"	20'-8"	16'-6"
	16"	25'-3"	21'-1"	16'-10"
PWI 56L, LPI 56	11-7/8"	20'-6"	17'-0"	13'-7"
	14"	20'-6"	17'-1"	13'-7"
	16"	20'-7"	17'-1"	13'-7"
	18"	**28'-3"**	**26'-6"**	**24'-6"**
	24"	**34'-10"**	**32'-7"**	**26'-0"**

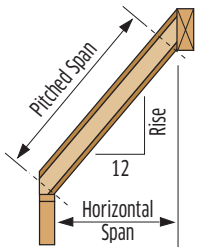
Table Usage:

1. Select the appropriate set of tables based on roof pitch.
2. Select the section of that table that corresponds to the specified roof live or snow load.
3. Find a span that meets or exceeds the design span.
4. Read the corresponding series, depth and spacing.

Notes:

1. Joist spans have been calculated in accordance with CSA O86 for the specified uniform snow and dead loads shown. These spans have not been evaluated for wind, snow drift or concentrated loads. The designer shall evaluate all required conditions.
2. The spans listed are the horizontal clear distance between supports and are valid for simple or continuous span applications. Continuous spans are based on the longest span. The shortest span shall not be less than 50% of the longest span. Refer to the Uplift Coefficients table below to determine the required uplift restraint for the end of the shorter span of continuous, unequal span joists due solely to gravity loads. Uplift due to wind may require additional restraint.
3. Uniform load deflection is limited to the following: L/360 on live load and L/180 on total load. Long term deflection (creep) has not been considered. The designer shall evaluate live and total load deflection, and creep in the final design of the member.
4. For deflection, the specified snow loads are reduced by the serviceability limit states Importance Factor (IS = 0.9).
5. These tables do not reflect any additional stiffness provided by the roof sheathing.
6. The spans are based on an end bearing length of 1-3/4" for joists up to 16" deep and 2-1/2" for joists 18" and deeper. An interior bearing length of at least 3-1/2" is required. The spans are limited to the bearing resistance of an SPF wall plate.
7. Web stiffeners shall be installed at all supports for joists 18" and deeper (shown in **bold**) and for all depths when using a "bird's mouth" detail.
8. Web fillers are required for I-Joists seated in hangers that do not laterally support the top flange or for hangers that require nailing into the web.
9. Provide continuous lateral support for compression flange. Provide lateral support at points of bearing to prevent twisting of the joist.
10. Roof joists shall have a minimum pitch of 1/4" per foot (1/4:12) for positive drainage.
11. Roof applications in high wind areas require special analysis which may reduce spans and require special connectors to resist uplift.
12. Use in dry service conditions only.
13. For conditions not covered or for additional information contact your PWT distributor.

ROOF JOIST SPAN



UPLIFT COEFFICIENTS

Short Span / Long Span	0.50	0.55	0.60	0.65	0.70	0.75	0.80	0.85	0.90	0.95	1.00
Coefficient A	0.375	0.709	1.088	1.514	1.989	2.516	3.096	3.732	4.427	5.182	6.000
Coefficient B	6.00	6.82	7.68	8.58	9.52	10.5	11.52	12.58	13.68	14.82	16.00

Note:

For joists continuous over two or more spans, where the short span is at least 50% of the long span, the end of the short span shall be anchored to resist any uplift force as indicated by a negative value from the following:

Factored Uplift Force (lb) = $L * s * (A * D_f - L_f) / B$ (a negative value represents uplift that must be restrained)

Where L = longest span (ft), s = joist spacing (ft), D_f = factored dead load (psf), L_f = factored live load (psf), A and B are coefficients given in the table

Web Hole Specifications
Circular Holes

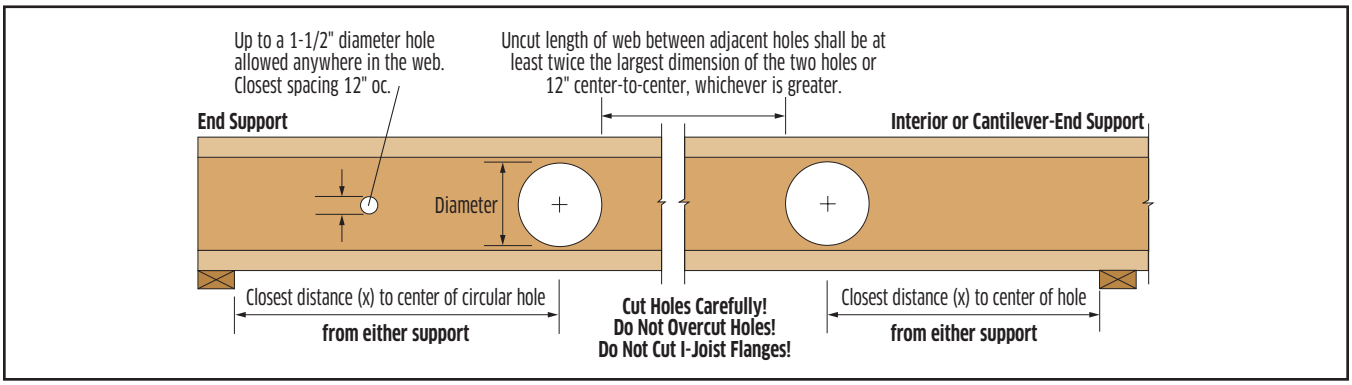


Table Usage:

1. Select the required series and depth.
2. Select the column corresponding to the required hole diameter. For diameters between those listed, use the next largest value.
3. Read the minimum distance from the inside face of bearing to the center of the circular hole.
4. Double check the distance to the other support, using the appropriate support condition.

Series	Depth	Circular Hole Diameter																
		2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"	15"	16"	17"	18"
PWI 20S, LPI 20Plus	9-1/2"	1'-0"	1'-0"	1'-6"	2'-1"	2'-9"	-	-	-	-	-	-	-	-	-	-	-	-
	11-7/8"	1'-0"	1'-5"	1'-11"	2'-6"	3'-1"	3'-8"	4'-3"	-	-	-	-	-	-	-	-	-	-
	14"	1'-4"	1'-10"	2'-4"	2'-9"	3'-3"	3'-9"	4'-3"	4'-9"	5'-4"	-	-	-	-	-	-	-	-
	16"	1'-9"	2'-2"	2'-7"	3'-1"	3'-6"	4'-0"	4'-5"	4'-11"	5'-4"	5'-11"	6'-6"	-	-	-	-	-	-
PWI 32S, LPI 32Plus	9-1/2"	1'-0"	1'-1"	1'-9"	2'-7"	3'-4"	-	-	-	-	-	-	-	-	-	-	-	-
	11-7/8"	1'-1"	1'-8"	2'-4"	3'-0"	3'-8"	4'-3"	4'-11"	-	-	-	-	-	-	-	-	-	-
	14"	1'-8"	2'-3"	2'-10"	3'-5"	3'-11"	4'-6"	5'-1"	5'-8"	6'-4"	-	-	-	-	-	-	-	-
	16"	2'-3"	2'-9"	3'-3"	3'-10"	4'-4"	4'-10"	5'-5"	5'-11"	6'-5"	7'-1"	7'-10"	-	-	-	-	-	-
PWI 36L, LPI 36	11-7/8"	1'-0"	2'-1"	3'-2"	4'-3"	5'-3"	6'-4"	7'-5"	-	-	-	-	-	-	-	-	-	-
	14"	1'-10"	2'-9"	3'-9"	4'-8"	5'-8"	6'-8"	7'-8"	8'-8"	9'-9"	-	-	-	-	-	-	-	-
	16"	2'-3"	3'-1"	4'-0"	4'-11"	5'-10"	6'-10"	7'-9"	8'-9"	9'-10"	10'-11"	12'-0"	-	-	-	-	-	-
	18"	1'-0"	1'-0"	1'-0"	1'-1"	1'-9"	2'-6"	3'-7"	4'-11"	6'-2"	7'-7"	8'-11"	10'-6"	12'-3"	-	-	-	-
PWI 42S, LPI 42Plus	9-1/2"	1'-3"	2'-3"	3'-3"	4'-3"	5'-3"	-	-	-	-	-	-	-	-	-	-	-	-
	11-7/8"	3'-3"	4'-0"	4'-10"	5'-7"	6'-4"	7'-1"	7'-11"	-	-	-	-	-	-	-	-	-	-
	14"	4'-8"	5'-3"	5'-10"	6'-5"	7'-0"	7'-8"	8'-5"	9'-3"	10'-2"	-	-	-	-	-	-	-	-
	16"	5'-8"	6'-2"	6'-9"	7'-3"	7'-9"	8'-4"	8'-11"	9'-8"	10'-7"	11'-5"	12'-5"	-	-	-	-	-	-
	18"	1'-0"	1'-2"	1'-9"	2'-7"	3'-6"	4'-6"	5'-5"	6'-5"	7'-5"	8'-5"	9'-9"	11'-6"	13'-7"	-	-	-	-
	20"	1'-4"	1'-9"	2'-3"	2'-11"	3'-9"	4'-7"	5'-6"	6'-4"	7'-2"	8'-1"	9'-1"	10'-4"	11'-11"	14'-1"	16'-4"	-	-
	24"	2'-6"	2'-10"	3'-3"	3'-7"	4'-4"	5'-1"	5'-10"	6'-7"	7'-3"	8'-0"	8'-9"	9'-7"	10'-5"	11'-6"	12'-11"	14'-7"	16'-10"
PWI 52S, LPI 52Plus	11-7/8"	5'-3"	5'-9"	6'-4"	6'-11"	7'-6"	8'-2"	8'-9"	-	-	-	-	-	-	-	-	-	-
	14"	6'-5"	6'-11"	7'-5"	8'-0"	8'-7"	9'-2"	9'-9"	10'-5"	11'-0"	-	-	-	-	-	-	-	-
	16"	7'-5"	7'-11"	8'-4"	8'-11"	9'-6"	10'-1"	10'-8"	11'-4"	12'-0"	12'-7"	13'-4"	-	-	-	-	-	-
PWI 56L, LPI 56	11-7/8"	3'-7"	4'-7"	5'-6"	6'-6"	7'-6"	8'-6"	9'-7"	-	-	-	-	-	-	-	-	-	-
	14"	4'-8"	5'-7"	6'-5"	7'-4"	8'-3"	9'-3"	10'-2"	11'-2"	12'-4"	-	-	-	-	-	-	-	-
	16"	5'-10"	6'-8"	7'-6"	8'-4"	9'-3"	10'-1"	10'-11"	11'-9"	12'-9"	13'-10"	15'-4"	-	-	-	-	-	-
	18"	2'-1"	2'-9"	3'-5"	4'-2"	5'-3"	6'-6"	7'-9"	8'-11"	10'-3"	11'-6"	12'-10"	14'-1"	15'-10"	-	-	-	-
	24"	4'-6"	5'-0"	5'-5"	6'-0"	7'-0"	8'-0"	9'-0"	9'-11"	10'-11"	11'-11"	13'-1"	14'-2"	15'-4"	16'-6"	17'-8"	18'-11"	20'-6"

Design Assumptions:

1. The hole locations listed above are valid for joists supporting only uniform loads. The specified uniform dead load shall not exceed the specified uniform live load.These tables have NOT been evaluated for concentrated loads.
2. Hole location is measured from the inside face of bearing to the center of a circular hole, from the closest support.
3. Verify that the joist selected will work for the span and loading conditions needed before checking hole location.
4. The maximum hole depth for circular holes is the I-joist depth less 4," except the maximum hole depth is 6" for 9-1/2" PWI joists, and 8" for 11-7/8" PWI joists.
5. Holes cannot be located in the span where designated "-", without further analysis by a design professional.

Notes:

1. Holes may be placed anywhere within the depth of the joist. A minimum 1/4" clear distance is required between the hole and the flanges.
2. Round holes up to 1-1/2" diameter may be placed anywhere in the web.
3. Perforated "knockouts" may be neglected when locating web holes.
4. Holes larger than 1-1/2" are not permitted in cantilevers without special engineering.
5. Multiple holes shall have a clear separation along the length of the joist of at least twice the larger dimension of the larger adjacent hole, or a minimum of 12" center-to-center, whichever is greater.
6. 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.
7. For conditions not covered in this table, use PWT's design software or contact your local PWT distributor for more information.

Web Hole Specifications
Rectangular Holes

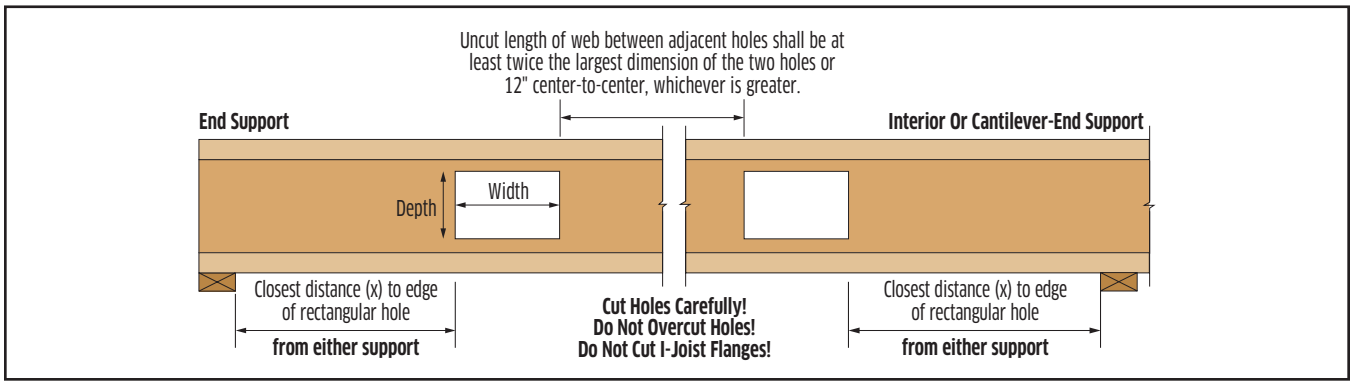


Table Usage:

1. Select the required series and depth.
2. Select the column corresponding to the required hole dimension. For dimensions between those listed, use the next largest value.
3. Read the minimum distance from the inside face of bearing to the nearest edge of the square or rectangular hole.
4. Double check the distance to the other support, using the appropriate support condition.

Series	Depth	Maximum Hole Dimension: Depth or Width																
		2"	3"	4"	5"	6"	7"	8"	9"	10"	11"	12"	13"	14"	15"	16"	17"	18"
PWI 20S, LPI 20Plus	9-1/2"	2'-11"	3'-6"	4'-1"	4'-10"	6'-1"	6'-5"	6'-10"	7'-2"	7'-7"	8'-0"	8'-5"	8'-11"	9'-6"	10'-2"	10'-10"	-	-
	11-7/8"	3'-11"	4'-5"	5'-0"	5'-9"	6'-9"	8'-1"	9'-8"	10'-2"	10'-8"	11'-3"	11'-11"	12'-7"	13'-5"	14'-4"	-	-	-
	14"	1'-3"	2'-0"	2'-8"	3'-5"	4'-1"	4'-11"	5'-10"	7'-3"	9'-5"	10'-4"	11'-4"	12'-4"	13'-4"	14'-5"	15'-10"	17'-6"	-
	16"	1'-8"	2'-4"	3'-0"	3'-9"	4'-5"	5'-2"	5'-11"	7'-0"	8'-7"	11'-0"	14'-6"	15'-9"	17'-1"	18'-9"	20'-9"	-	-
PWI 32S, LPI 32Plus	9-1/2"	3'-7"	4'-2"	4'-10"	5'-10"	7'-1"	7'-5"	7'-9"	8'-1"	8'-5"	8'-10"	9'-4"	9'-10"	10'-5"	11'-1"	11'-10"	-	-
	11-7/8"	4'-7"	5'-2"	5'-10"	6'-8"	7'-10"	9'-2"	10'-8"	11'-2"	11'-8"	12'-4"	13'-0"	13'-8"	14'-7"	15'-8"	-	-	-
	14"	1'-7"	2'-5"	3'-3"	4'-1"	5'-0"	5'-10"	7'-0"	8'-8"	11'-1"	11'-10"	12'-8"	13'-5"	14'-6"	15'-8"	17'-0"	18'-10"	-
	16"	2'-1"	2'-11"	3'-9"	4'-7"	5'-5"	6'-2"	7'-2"	8'-6"	10'-5"	12'-11"	15'-9"	16'-11"	18'-5"	20'-0"	22'-2"	-	-
PWI 36L, LPI 36	11-7/8"	6'-9"	7'-3"	7'-11"	8'-7"	9'-4"	10'-4"	11'-7"	12'-1"	12'-7"	13'-3"	13'-10"	14'-8"	15'-7"	16'-8"	-	-	-
	14"	3'-10"	4'-9"	5'-8"	6'-7"	7'-7"	8'-7"	9'-7"	10'-9"	12'-5"	13'-1"	13'-9"	14'-7"	15'-6"	16'-9"	18'-1"	19'-11"	-
	16"	4'-6"	5'-5"	6'-4"	7'-3"	8'-3"	9'-3"	10'-4"	11'-6"	12'-9"	14'-7"	17'-0"	18'-2"	19'-7"	21'-3"	23'-3"	-	-
	18"	1'-0"	1'-1"	1'-10"	2'-7"	3'-10"	5'-3"	6'-8"	8'-2"	9'-8"	11'-6"	13'-5"	16'-0"	20'-1"	22'-5"	25'-7"	-	-
PWI 42S, LPI 42Plus	9-1/2"	5'-5"	6'-3"	7'-0"	7'-11"	8'-11"	9'-3"	9'-7"	9'-11"	10'-4"	10'-10"	11'-4"	11'-11"	12'-7"	13'-4"	14'-3"	-	-
	11-7/8"	7'-6"	8'-3"	8'-11"	9'-8"	10'-7"	11'-9"	13'-2"	13'-8"	14'-3"	14'-11"	15'-8"	16'-7"	17'-6"	18'-9"	-	-	-
	14"	4'-7"	5'-5"	6'-4"	7'-2"	8'-3"	9'-6"	10'-10"	12'-3"	14'-2"	14'-10"	15'-8"	16'-7"	17'-8"	18'-11"	20'-6"	22'-6"	-
	16"	5'-7"	6'-5"	7'-2"	8'-0"	8'-11"	10'-2"	11'-7"	13'-0"	14'-6"	16'-8"	19'-6"	20'-10"	22'-3"	24'-1"	26'-4"	-	-
	18"	1'-9"	2'-7"	3'-7"	4'-8"	5'-8"	6'-8"	7'-9"	8'-11"	10'-6"	12'-8"	15'-0"	17'-11"	22'-5"	24'-11"	28'-6"	-	-
	20"	2'-4"	3'-2"	4'-2"	5'-1"	6'-0"	7'-0"	8'-0"	9'-1"	10'-6"	12'-4"	14'-10"	17'-4"	20'-7"	25'-5"	-	-	-
	24"	3'-6"	4'-4"	5'-3"	6'-1"	7'-0"	7'-10"	8'-9"	9'-8"	10'-10"	12'-3"	14'-1"	16'-8"	19'-8"	22'-9"	26'-10"	32'-3"	-
PWI 52S, LPI 52Plus	11-7/8"	8'-5"	9'-0"	9'-7"	10'-5"	11'-3"	12'-5"	13'-10"	14'-5"	15'-0"	15'-8"	16'-6"	17'-4"	18'-5"	19'-8"	-	-	-
	14"	6'-3"	7'-1"	7'-10"	8'-9"	9'-8"	10'-6"	11'-7"	13'-0"	14'-10"	15'-7"	16'-5"	17'-4"	18'-6"	19'-10"	21'-6"	23'-5"	-
	16"	7'-4"	8'-0"	8'-10"	9'-9"	10'-8"	11'-8"	12'-8"	13'-11"	15'-6"	17'-6"	20'-5"	21'-8"	23'-3"	25'-2"	27'-4"	-	-
PWI 56L, LPI 56	11-7/8"	8'-10"	9'-5"	10'-1"	10'-11"	11'-10"	13'-0"	14'-6"	15'-2"	15'-9"	16'-6"	17'-4"	18'-3"	19'-3"	20'-5"	-	-	-
	14"	6'-7"	7'-5"	8'-3"	9'-2"	10'-1"	11'-1"	12'-2"	13'-8"	15'-7"	16'-4"	17'-3"	18'-2"	19'-5"	20'-9"	22'-6"	24'-4"	-
	16"	7'-11"	8'-10"	9'-8"	10'-6"	11'-4"	12'-3"	13'-3"	14'-7"	16'-2"	18'-2"	21'-3"	22'-8"	24'-3"	26'-2"	28'-3"	-	-
	18"	3'-4"	4'-2"	5'-4"	6'-8"	8'-0"	9'-4"	10'-8"	12'-1"	13'-5"	15'-0"	17'-1"	20'-1"	25'-2"	27'-10"	31'-1"	-	-
	24"	5'-10"	6'-11"	8'-2"	9'-4"	10'-6"	11'-8"	13'-0"	14'-4"	15'-9"	17'-2"	18'-7"	20'-5"	22'-8"	25'-6"	29'-6"	34'-7"	-

Design Assumptions:

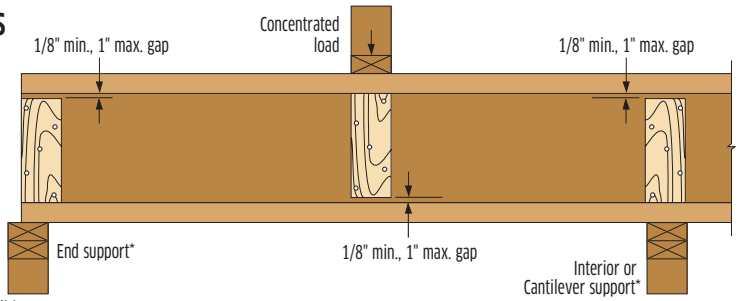
1. The hole locations listed above are valid for joists supporting only uniform loads. The specified uniform dead load shall not exceed the specified uniform live load.These tables have NOT been evaluated for concentrated loads.
2. Hole location is measured from the inside face of bearing to the nearest edge of a rectangular hole, from the closest support.
3. Verify that the joist selected will work for the span and loading conditions needed before checking hole location.
4. The maximum hole depth for rectangular holes is the I-joist depth less 4", except the maximum hole depth is 6" for 9-1/2" PWI joists, and 8" for 11-7/8" PWI joists. Where the Maximum Hole Dimension exceeds the hole depth, the dimension refers to hole width and the depth of the hole is assumed to be the maximum for that joist depth. The maximum hole width is 18," regardless of I-joist depth.
5. Holes cannot be located in the span where designated "-", without further analysis by a design professional.

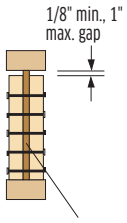
Notes:

1. Holes may be placed anywhere within the depth of the joist. A minimum 1/4" clear distance is required between the hole and the flanges.
2. Round holes up to 1-1/2" diameter may be placed anywhere in the web.
3. Perforated "knockouts" may be neglected when locating web holes.
4. Holes larger than 1-1/2" are not permitted in cantilevers without special engineering.
5. Multiple holes shall have a clear separation along the length of the joist of at least twice the larger dimension of the larger adjacent hole, or a minimum of 12" center-to-center, whichever is greater.
6. 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.
7. For conditions not covered in this table, use PWT's design software or contact your local PWT distributor for more information.

Web Stiffeners, Rim & Blocking, Nailing

WEB STIFFENER DETAILS





Nails to be equally spaced, staggered and driven alternately from each face. Clinch nails where possible.

*Refer to framing plan for specific conditions.

Notes:

1. Web stiffeners shall be installed in pairs – one to each side of the web. Web stiffeners are always required for the "Bird's Mouth" roof joist bearing detail.
2. Web stiffeners shall be cut to fit between the flanges of the PWT™ I-Joist, leaving a minimum 1/8" gap (1" maximum). At bearing locations, the stiffeners shall be installed tight to the bottom flange. At locations of concentrated loads, the stiffeners shall be installed tight to the top flange.
3. Web stiffeners shall be cut from APA Rated OSB (or equal) or from PWT LVL or OSB Rim Board. 2x lumber is permissible. Do NOT use 1x lumber as it tends to split. Do NOT build up the required stiffener thickness from multiple pieces.
4. Web stiffeners shall be the same width as the bearing surface, with a minimum of 3-1/2."
5. See Web Stiffener Requirements for minimum stiffener thickness, maximum stiffener height and required nailing.

WEB STIFFENER REQUIREMENTS

Series	Depth	Minimum Thickness	Maximum Height	Nail Size*	Nail Qty
PWI 20S, LPI 20Plus, PWI 32S, LPI 32Plus	9-1/2"	23/32"	6-3/8"	8d (2-1/2")	3
	11-7/8"	23/32"	8-3/4"	8d (2-1/2")	3
	14"	23/32"	10-7/8"	8d (2-1/2")	3
	16"	23/32"	12-7/8"	8d (2-1/2")	3
PWI 36L, LPI 36	9-1/2"	23/32"	8-3/4"	8d (2-1/2")	4
	11-7/8"	23/32"	10-7/8"	8d (2-1/2")	5
	14"	23/32"	12-7/8"	8d (2-1/2")	6
	16"	23/32"	14-7/8"	8d (2-1/2")	7
PWI 42S, LPI 42Plus	9-1/2"	1-1/2"	6-3/8"	10d (3")	3
	11-7/8"	1-1/2"	8-3/4"	10d (3")	3
	14"	1-1/2"	10-7/8"	10d (3")	3
	16"	1-1/2"	12-7/8"	10d (3")	3
	18"	1-1/2"	14-7/8"	10d (3")	7
	20"	1-1/2"	16-7/8"	10d (3")	8
	24"	1-1/2"	20-7/8"	10d (3")	10
PWI 52S, LPI 52Plus	11-7/8"	1-1/2"	8-3/4"	10d (3")	3
	14"	1-1/2"	10-7/8"	10d (3")	3
	16"	1-1/2"	12-7/8"	10d (3")	3
PWI 56L, LPI 56	11-7/8"	1-1/2"	8-3/4"	10d (3")	4
	14"	1-1/2"	10-7/8"	10d (3")	5
	16"	1-1/2"	12-7/8"	10d (3")	6
	18"	1-1/2"	14-7/8"	10d (3")	7
	24"	1-1/2"	20-7/8"	10d (3")	10

*Nail Size is for common wire nails.

RIM AND BLOCKING CAPACITY

Series	Depth	Factored Vertical Load Resistance (plf)
PWI 20S, LPI 20Plus	9-1/2"	2755
	11-7/8"	2552
	14"	2320
	16"	2175
PWI 32S, LPI 32Plus	9-1/2"	3190
	11-7/8"	3190
	14"	2320
	16"	2175
PWI 36L, LPI 36	11-7/8"	2610
	14"	2610
	16"	2610
	18"	1885
PWI 42S, LPI 42Plus	9-1/2"	3190
	11-7/8"	3190
	14"	2900
	16"	2900
	18"	2465
	20"	2291
	24"	1595
PWI 52S, LPI 52Plus	11-7/8"	3480
	14"	3190
	16"	2900
PWI 56L, LPI 56	11-7/8"	3480
	14"	3190
	16"	2755
	18"	2465
	24"	1595

Notes:

1. The Factored Vertical Load Resistance is the capacity in pounds per lineal foot of length (plf) and shall not be adjusted for load duration.
2. Concentrated vertical loads require the addition of squash blocks. Do not use rim or blocking to support concentrated vertical loads.
3. The Factored Lateral Load Resistance for all series above is 260 plf but may be limited by the connection details used. Do not exceed the Flange Face Nailing requirements at right.

FLANGE FACE NAILING

Series	Common Wire Nail Size	Minimum Nail Distance	
		oc Spacing	End
PWI 20S, LPI 20Plus PWI 32S, LPI 32Plus PWI 42S, LPI 42Plus PWI 52S, LPI 52Plus	2-1/2"	2"	1"
	3"	3"	1-1/2"
	3-1/4"	3"	1-1/2"
	3-1/2"	4"	1-1/2"
PWI 36L, LPI 36 PWI 56L, LPI 56	2-1/2"	3"	1-1/2"
	3"	3"	1-1/2"
	3-1/4"	3"	1-1/2"
	3-1/2"	5"	1-1/2"

Notes:

1. Use only 2-1/2" or 3" nails when securing an PWI floor or roof joist to its supports.
2. Power-driven nails shall have a yield strength equivalent to common wire nails of the same shank diameter.

NAIL NAMES AND SIZES

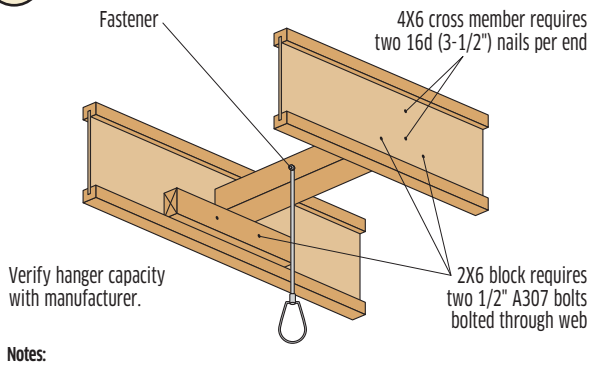
Callout	Common Name	Min. Length	Diameter
8d	box	2-1/2"	0.113"
	common	2-1/2"	0.131"
10d	box	3"	0.128"
	common	3"	0.148"
16d	box	3-1/2"	0.135"
	common	3-1/2"	0.162"

Notes:

1. Common nails are assumed unless otherwise indicated.
2. 10d box may be substituted for 8d common nails.

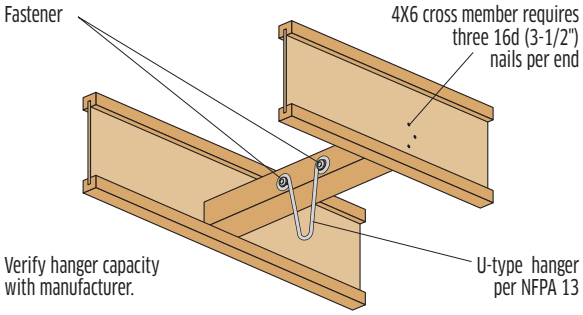
Sprinkler Details

S2 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 610 LBS.



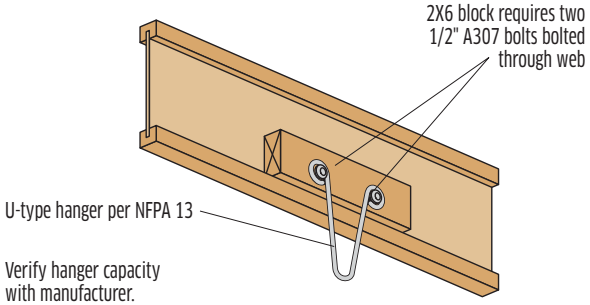
Notes:
1. Holes for bolts shall be between 1/32" and 1/16" greater than the diameter of the bolt.
2. Provide a flat washer and nut for bolts.
3. Use three 16d (3-1/2") common nails to attach cross member to web.
4. Lag screw fastener for rod should be located 1" from top of cross member.
5. Consult NFPA 13 for lag screw dimensions and maximum supported pipe diameter.
6. Sprinkler support should be centered between the joists.
7. Spacing between joists is limited to 48" oc.
8. Framing members to be SPF or better.

S3 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 375 LBS.



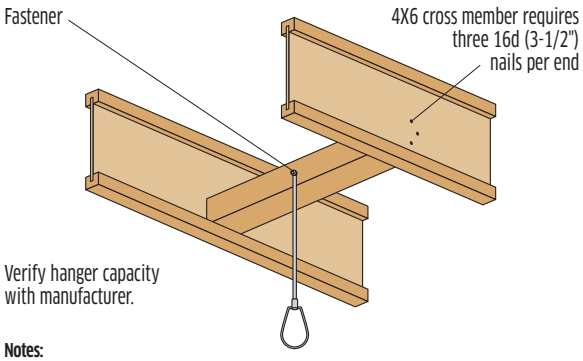
Notes:
1. Use three 16d (3-1/2") common nails to attach cross member to web.
2. Lag screw fastener for hanger should be located 2-1/2" from bottom of cross member for branch lines and 3" for mains.
3. Consult NFPA 13 for lag screw dimensions and maximum supported pipe diameter.
4. Sprinkler support should be centered between the joists.
5. Spacing between joists is limited to 48" oc.
6. Framing members to be SPF or better.

S4 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 305 LBS.



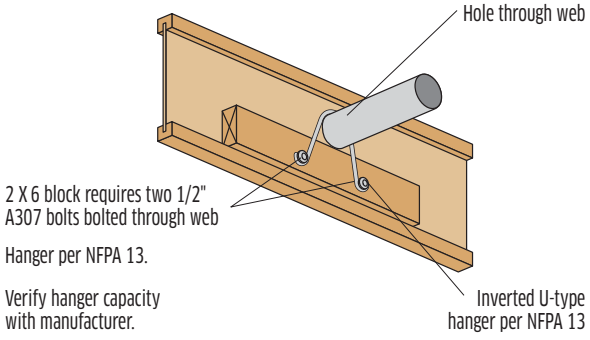
Notes:
1. Holes for bolts shall be between 1/32" and 1/16" greater than the diameter of the bolt.
2. Provide flat washer and nut for bolts.
3. Bolts should be located 2-1/2" from bottom of block.
4. Consult NFPA 13 for maximum supported pipe diameter.
5. Framing members to be SPF or better.

S7 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 375 LBS.



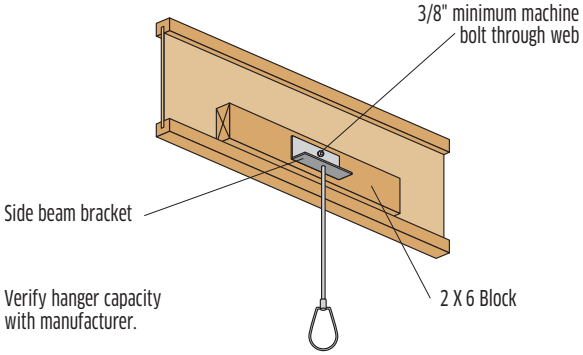
Notes:
1. Use three 16d (3-1/2") common nails to attach cross member to web.
2. Lag screw fastener for rod should be located 2-1/2" from bottom of cross member for branch lines and 3" for mains.
3. Consult NFPA 13 for lag screw dimensions and maximum supported pipe diameter.
4. Sprinkler support should be centered between joists.
5. Joist spacing is limited to 48" oc.
6. Framing members to be SPF or better.

S8 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 305 LBS.



Notes:
1. Holes for bolts shall be between 1/32" and 1/16" greater than the diameter of the bolt.
2. Provide a flat washer and nut for bolts.
3. Bolts should be located 2-1/2" from bottom of block.
4. Consult NFPA 13 for maximum supported pipe diameter.
5. See product specific technical guide for hole sizes and location.
6. Framing members to be SPF or better.

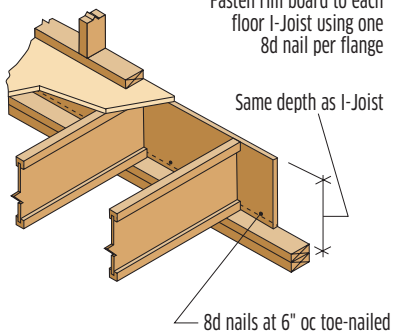
S9 SPRINKLER SUPPORT
FACTORED ASSEMBLY CAPACITY 120 LBS.



Notes:
1. Holes for bolts shall be between 1/32" and 1/16" greater than the diameter of the bolt.
2. Provide a flat washer and nut for bolts.
3. Bolts should be located 2-1/2" from bottom of block.
4. Consult NFPA 13 for maximum supported pipe diameter.
5. Side beam bracket per NFPA 13.
6. Framing members to be SPF or better.

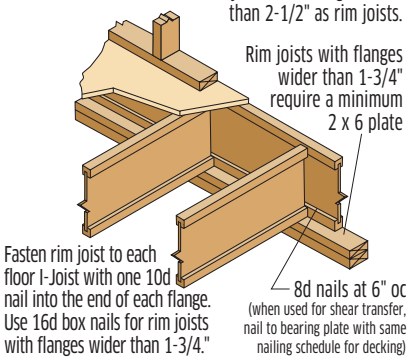
Floor Details

A1 RIM BOARD

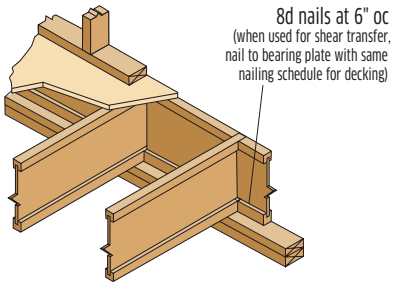


A2 RIM JOIST

Note: Do not use PWI joists with flanges wider than 2-1/2" as rim joists.

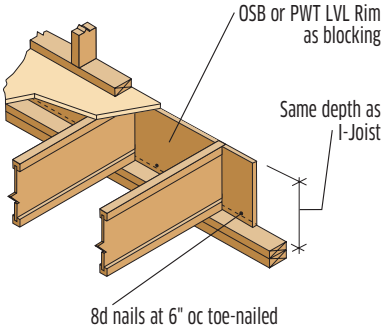


A3 BLOCKING AT EXTERIOR WALL



OSB or PWT LVL Rim may be substituted for PWI blocking

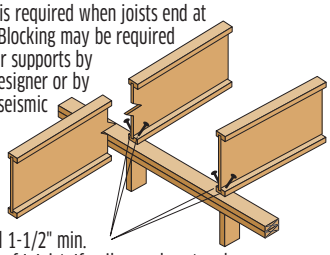
A4 SOLID BLOCKING AT EXTERIOR WALL



A5 JOIST SUPPORT NAILING

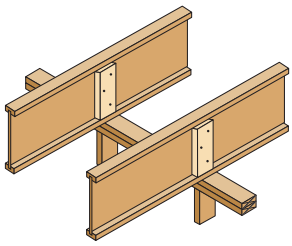
Secure I-Joist to plate with two 8d nails. Drive one nail from each side of I-Joist, angled inward.

Blocking is required when joists end at support. Blocking may be required at interior supports by project designer or by code for seismic design



Place nail 1-1/2" min. from end of I-Joist. If nails are close to edge of plate, drive at an angle to reduce splitting

B1 WEB STIFFENERS AT INTERIOR SUPPORT (WHEN REQUIRED)

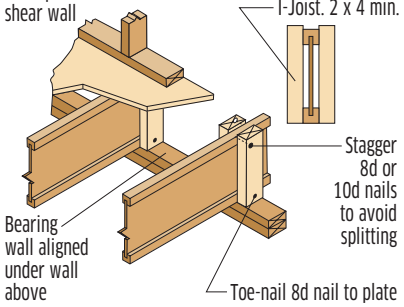


Verify stiffener requirements (see Web Stiffener detail)

B2 SQUASH BLOCKS

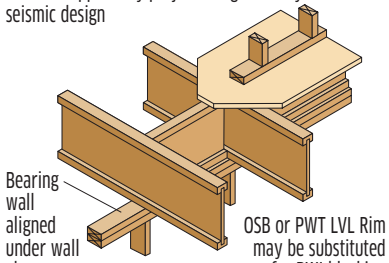
Use double squash blocks as specified. Squash blocks shall be cut 1/16" taller than I-Joist. 2 x 4 min.

Blocking panels may be required with shear wall



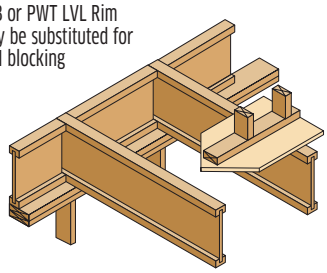
B3 BLOCKING AT INTERIOR SUPPORT

Blocking is not required if no wall above unless I-Joists end at support. Blocking may be required at interior supports by project designer or by code for seismic design



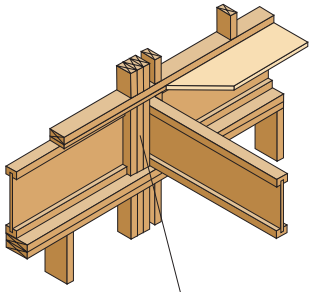
NON-STACKING WALLS

OSB or PWT LVL Rim may be substituted for PWI blocking

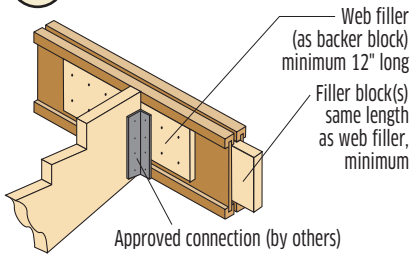


PWT I-Joists shall be designed to carry all applied loads including walls from above that do not stack directly over the I-Joist support.

D2 POST LOADS



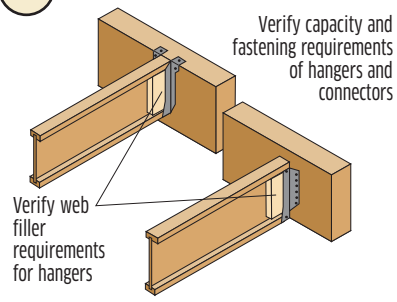
E1 STAIR STRINGER



See I-Joist Header Cross-Section for connection information of the filler and backer blocks

See I-Joist Filler Schedule for filler block and web filler sizes

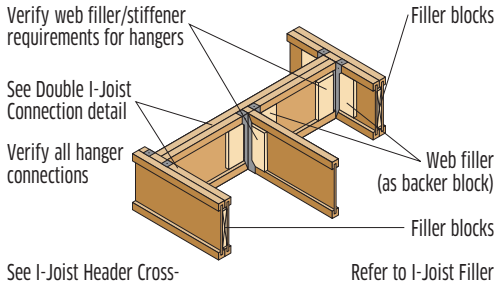
E2 HANGER DETAIL



Applied loads at end of I-joist must be supported directly by the girder, or by a ledger or blocking fastened to the girder.

Floor Details

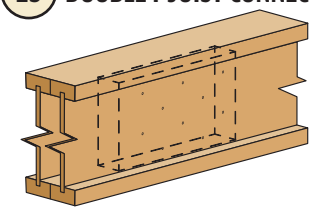
E3 I-JOIST HEADER



See I-Joist Header Cross-Section for information on attaching web fillers and filler blocks

Refer to I-Joist Filler Thickness table for web filler (backer block) and filler block sizes

E5 DOUBLE I-JOIST CONNECTION



Refer to I-Joist Filler Thickness table for filler block sizes

Filler blocks must be:
- Long enough not to split when nailed (12" min.)
- Located at each support
- Under all concentrated loads that are not equally applied to each ply
- Centered behind each hanger
- At 24" oc max. under all uniform loads that are not equally applied to each ply
- Installed tight to top flange at top-mount hangers and top concentrated loads.
- Installed tight to bottom flange at supports and facemount hangers.

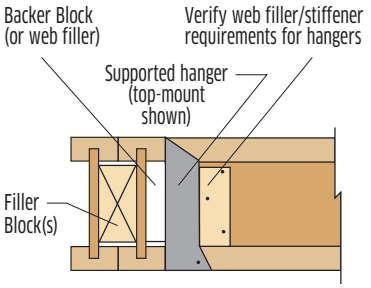
Floor sheathing to be glued and nailed to flanges of both plies

Attach using ten (10) 0.131" x 3-1/4" nails (min.):
- Joists ≤ 2-1/2" thick: from either side, total of 10 nails
- Joists > 2-1/2" thick: from each side, total of 20 nails

Stagger rows, clinch where possible, and spaced to avoid splitting.

E4 I-JOIST HEADER CROSS SECTION

Filler Blocks: Fasten I-Joists together with filler blocks between the PWI webs:
- Filler blocks must be installed at any load that is not applied to the top of the member and equally to all plies. See Detail E5 for installation instructions.
- For joists supporting only top loads that are equally applied to both plies, filler blocks can be omitted.



Backer Blocks: Minimum 12" long backer blocks must be installed at all hangers and all concentrated loads that are not equally applied to each ply, center backer block on load.
- For a single I-joist header install backer blocks to both sides of the web.
- Backer blocks may be omitted for top-mount hangers supporting only downward loads not exceeding 250 lbs.
- Install backer blocks tight to top flange for top-mount hangers or top concentrated loads. Install tight to bottom flange for face-mount hangers.
- Attach using 10 nails (0.131"x3-1/4" (min.), clinch where possible) spaced to avoid splitting, with half the nails to each side of the center of the supported hanger.
- Face mount hanger nails must be min. 3" long per manufacturer's specifications.

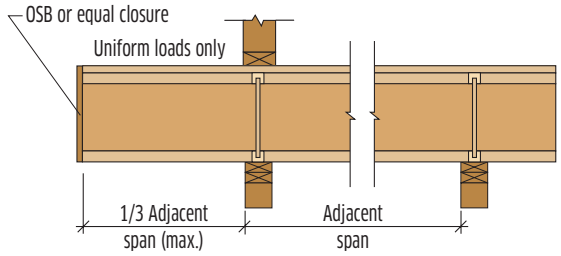
Filler and Backer Blocks:
- Refer to the I-Joist Filler Thickness table for the correct filler and backer block thickness.
- Filler and backer blocks shall consist of APA Rated wood structural panel (OSB or plywood), 2 x lumber (SPF or better), or PWT LVL or OSB Rim Board.
- Filler and backer blocks for members that are top-loaded only, or at hangers that do not require nailing into the web, shall be: at least 5-1/2" deep for I-joists up to 11-7/8" deep and at least 7-1/4" deep for I-joists deeper than 11-7/8" . Otherwise, filler blocks shall fit the clear distance between flanges with a gap of at least 1/8", but not more than 1".
- For double PWIs that are not top loaded or have loads that are not applied equally to both plies, the max unfactored loads for standard duration: Concentrated Load = 1200 lbs., Uniform Load = 520 plf. Loads may be increased with more nails and adjusted for other load durations.

Contact the project's design professional or a PWT distributor if these conditions are not met.

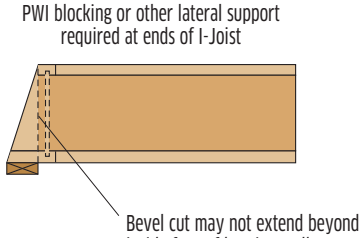
Filler Block Depth Example:
Multiple filler blocks may be stacked vertically to achieve the filler depth for a 14" deep I-joist (min. req. is 14" – 3" – 1" = 10"). One row of nails must be in each filler.

Backer Block Length Example:
Two pieces, example 2 x 8 (min.) lumber, that are cut to the proper height may be set vertically side-by-side to achieve the required minimum 12" length.

NON LOAD-BEARING CANTILEVER



BEVEL CUT/FIRE CUT



I-JOIST FILLER THICKNESS

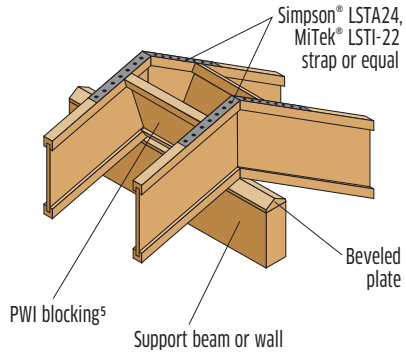
Span (ft)	Filler Block	Web Filler/Backer Block
PWI 20S, LPI 20Plus PWI 32S, LPI 32Plus	2-1/8"	1"
PWI 36L, LPI 36	1-7/8"	7/8"
PWI 42S, LPI 42Plus PWI 52S, LPI 52Plus PWI 56L, LPI 56	3"	1-1/2"

Notes:
1. Backer blocks and filler blocks shall consist of APA Rated wood structural panel (OSB or plywood), or 2x lumber (SPF or better).
2. OSB or PWT LVL Rim may also be used
3. Refer to the Notes for the I-Joist Header Cross-Section above for details on the required height and length, and nailing of the backer blocks and filler blocks.

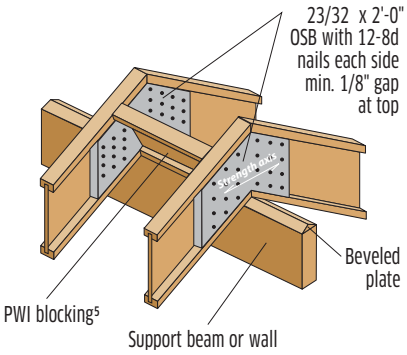
General Notes:
1. Some wind or seismic loads may require different or additional details and connections.
2. Verify building code requirements for suitability of details shown.
3. Refer to page 4 for bearing length requirements.
4. Refer to page 21 for Flange Face Nailing Schedule for PWI rim joist or blocking panel nailing.
5. Lateral support shall be considered for bottom flange when there is no sheathing on underside.
6. Verify capacity and fastening requirements of hangers and connectors.
7. Squash block capacity designed by others.
8. Do not use PWI joists with flanges wider than 2-1/2" as rim joists.

Roof Details

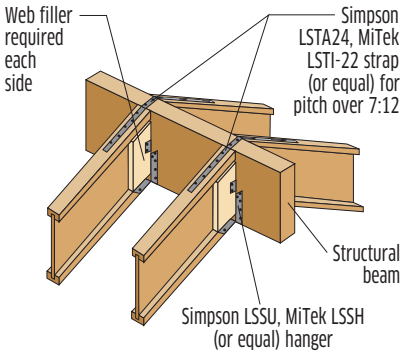
J1 RAFTER CONNECTION



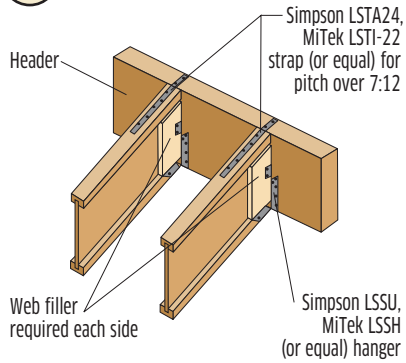
J2 RAFTER CONNECTION WITH FITTED OSB GUSSET



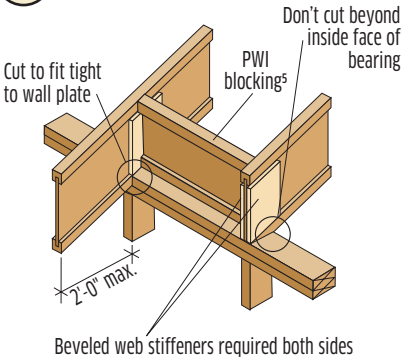
J3 RIDGE RAFTER CONNECTION



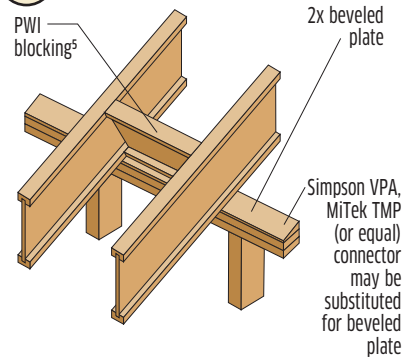
J4 HEADER CONNECTION



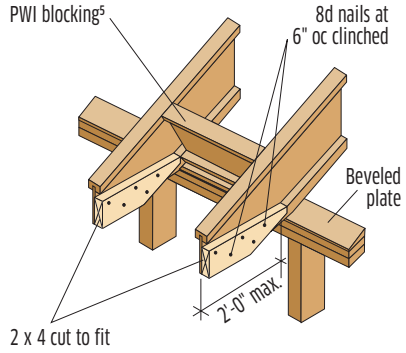
H1 BIRD'S MOUTH (LOWER BEARING ONLY)



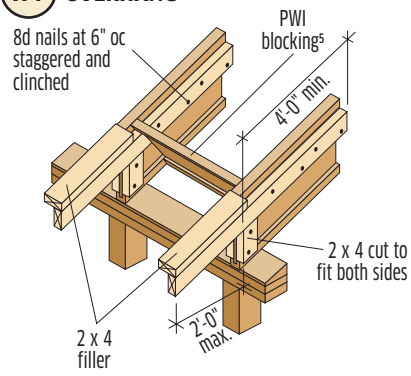
H2 BEVELED PLATE



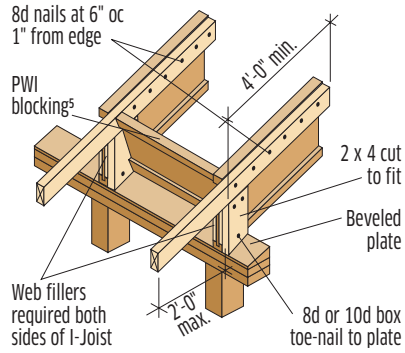
H3 FLAT SOFFIT (FASCIA SUPPORT)



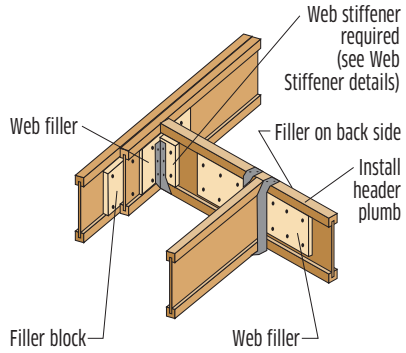
H4 OVERHANG



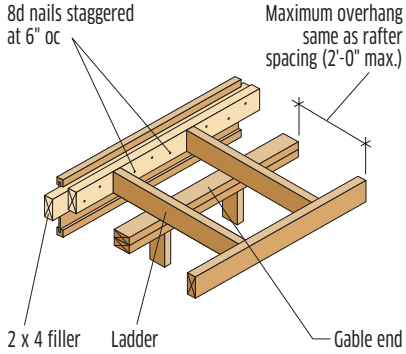
H5 OVERHANG



K1 ROOF OPENING HANGER CONNECTIONS



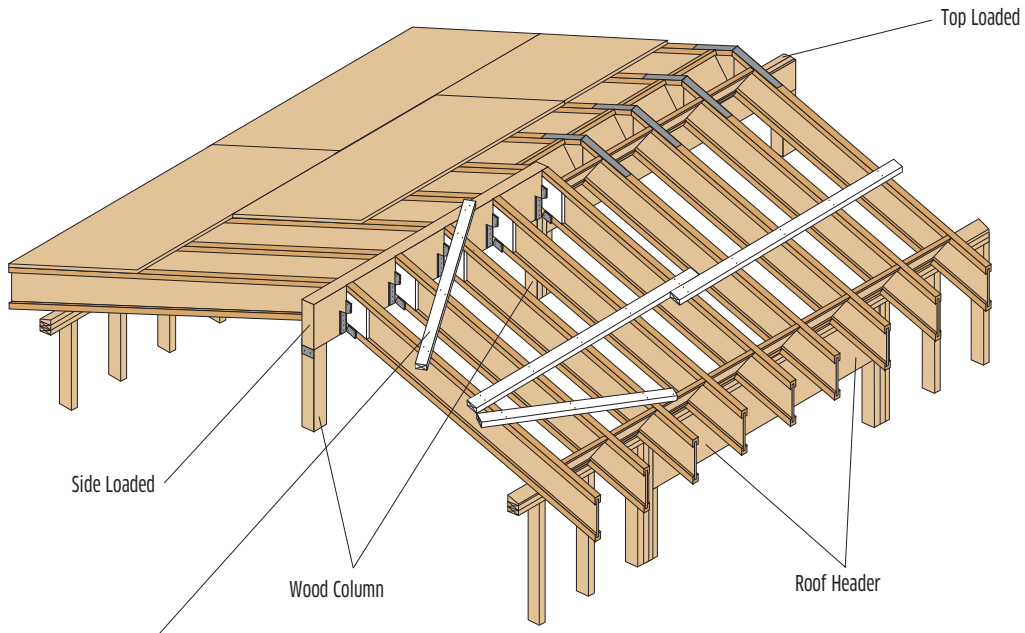
K2 OUTRIGGER



Notes:

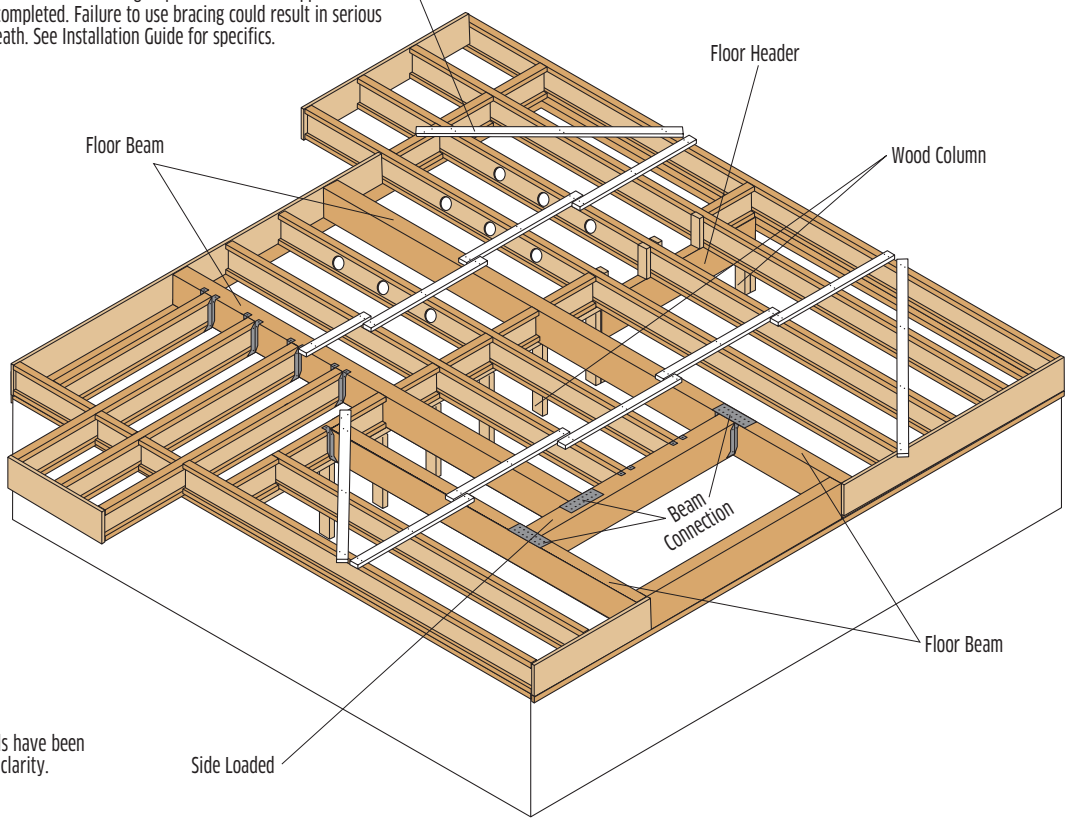
1. Minimum pitch: 1/4" per foot (1/4:12). Maximum pitch: 12" per foot (12:12).
2. Verify capacity and fastening requirements of hangers and connectors.
3. Some wind or seismic loads may require different or additional details and connections. Uplift anchors may be required.
4. 4" diameter hole(s) may be cut in blocking for ventilation.
5. Lateral resistance shall be provided. Other methods of restraint, such as full depth OSB Rim Board, PWT LVL or metal X-bracing may be substituted for the PWI blocking shown.

Temporary Bracing



WARNING:
Temporary construction bracing required for lateral support before decking is completed. Failure to use bracing could result in serious injury or death. See Installation Guide for specifics.

WARNING:
Temporary construction bracing required for lateral support before decking is completed. Failure to use bracing could result in serious injury or death. See Installation Guide for specifics.



Note:
Some details have been left out for clarity.

Rim Board

FACTORED RIM BOARD RESISTANCE

Material	Grade	Thickness	Vertical Load Resistance			Lateral Load[4,5,6] Resistance, f_H (plf)
			Uniform		Concentrated	
			d ≤ 16"	16" < d ≤ 24"	d ≤ 24"	
OSB	APA C1/Rim Board[7]	1-1/8"	7033	4640	5075	219

Notes:

1. The Factored Vertical Load Resistance shall not be increased for short-term load duration.
2. The Factored Vertical Load Resistance is based on the resistance of the rim board and may need to be reduced based on the bearing resistance of the supporting wall plate or the attached floor sheathing.
3. The Factored Concentrated Vertical Load Resistance is assumed to be applied through a minimum 4-1/2" bearing length (3-stud post).
4. The Factored Lateral Load Resistance is based on a short-term load duration and shall not be increased.
5. The Factored Lateral Load Resistance is based on the connections specified in the Installation details below.
6. Additional framing connectors fastened to the face of the rim board may be used to increase lateral resistance for wind and seismic design.
7. APA C1 grade in product standard ANSI/APA PRR 410-2011 is equivalent to the rim board grade in product standard APA PRR-401C.

FACTORED UNIFORM LOADS (PLF) FOR RIM BOARD HEADERS: MAXIMUM 4' CLEAR SPAN

Material	Thickness	Rim Board Depth			
		9-1/2"	11-7/8"	2-Ply 14"	2-Ply 16"
OSB	1-1/8"	620 (3")	965 (3")	2220 (4-1/2")	2535 (4-1/2")

Notes:

1. This table is for preliminary design for uniform gravity loads only. Final design should include a complete analysis of all loads and connections.
2. The factored load resistances are for a maximum 4' clear span with minimum bearings for each end (listed in parentheses) based on the bearing resistance of the rim board. For headers bearing on wood plates, the bearing length may need to be increased based on the ratio of the bearing resistance of the rim board divided by the bearing resistance of the plate species.
3. Standard load duration is assumed and shall be adjusted according to code.
4. Depths greater than 11-7/8" shall be used with a minimum of two plies, as shown. Depths of 11-7/8" and less may be used as a two-ply header by multiplying the resistance by two.
5. Multiple-ply headers shall be toe-nailed to the plate from both faces. Fasten the floor sheathing to the top of each ply to provide proper lateral support for each ply.
6. For multiple-ply headers supporting top-loads only, fasten plies together with minimum 2-1/2" nails (common wire or spiral) at a maximum spacing of 12" oc. Use 2 rows of nails for 9-1/2" and 11-7/8". Use 3 rows for depths 14" and greater. Clinch the nails where possible. For side-loaded multiple-ply headers, refer to the Connection Resistance For Side-Loaded 2-Ply Rim Board Headers table below for the required nailing and the maximum side load that can be applied.
7. The designer shall verify proper bearing for the header.
8. Joints in the rim are not allowed over openings and must be located at least 12" from any opening.
9. Refer to the "APA Performance Rated Rim Boards - Limit States Design" (Form No. D340 CA) for additional information including uniform load resistance for smaller openings.

FACTORED CONNECTION RESISTANCE FOR SIDE-LOADED 2-PLY RIM BOARD HEADERS (PLF)

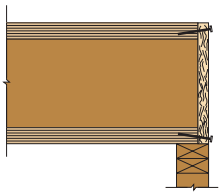
Material	Thickness	Minimum Nail Size	3 Rows of Nails at 6" oc	4 Rows of Nails at 6" oc	5 Rows of Nails at 6" oc	6 Rows of Nails at 6" oc
OSB	1-1/8"	2-1/2"	1280	1707	2134	2561

Notes:

1. This table represents the factored uniform side-load resistance of the connection for a 2-ply header. The total factored uniform load, including top-load and side-load, shall not exceed the factored uniform load resistance of the header as tabulated above.
2. The tabulated side-load resistance is for standard load duration and shall be adjusted according to code.
3. Use 3 rows of nails for 9-1/2" and 11-7/8"; 4 rows for 14" and 16"; 5 rows for 18" and 20"; 6 rows for 22" and 24" deep rim board.
4. Nails may be either common wire or spiral. The factored resistances are based on spiral nails. Clinch the nails where possible.
5. Headers consisting of more than 2 plies, alternate fastening or higher side loads are possible but require proper design of the connection.

INSTALLATION

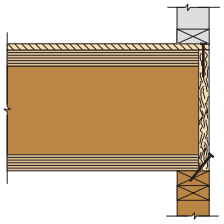
RIM TO JOIST CONNECTION



Nail rim to I-Joist with one 8d (box or common) or 10d box nail into each flange.

DECK TO RIM AND RIM TO PLATE CONNECTIONS[1]

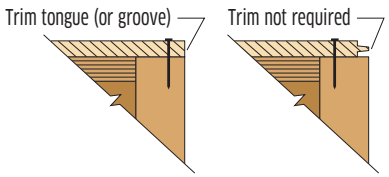
- Nail floor sheathing to rim board with 8d nails at 6" oc.
- Nail wall plate through floor sheathing into rim per code.
- Toe-nail rim board to wall plate with 8d nails at 6" oc.



See T&G Trim Requirements detail and table.

T&G TRIM REQUIREMENTS[2]

See T&G Trim Requirements table below for when to trim tongue or groove.



Notes:

1. Additional framing connectors to the face of the rim board may be used to increase lateral capacity for wind and seismic design.
2. Trim the tongue or groove of the floor sheathing in accordance with the T&G Trim Requirements table.

T&G TRIM REQUIREMENTS

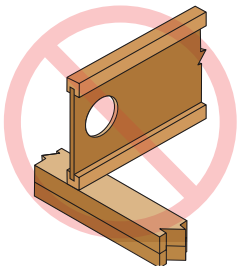
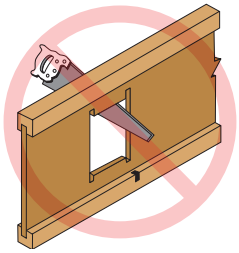
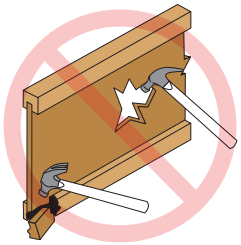
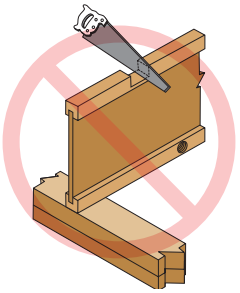
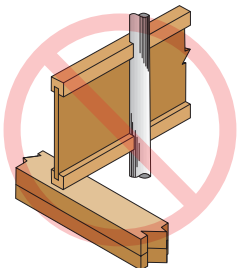
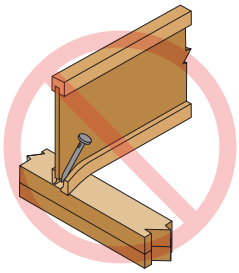
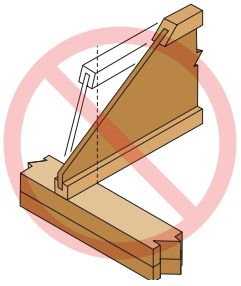
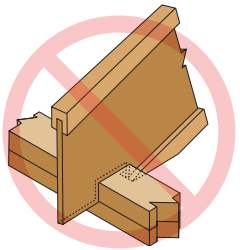
Floor Sheathing Thickness	Rim Board Thickness			
	1"	1-1/8"	1-1/4"	> 1-1/4"
≤ 7/8"	Trim	Not Required	Not Required	Not Required
> 7/8"	Trim	Trim	Trim	Not Required

Warnings

W A R N I N G S

The following conditions are NOT permitted!

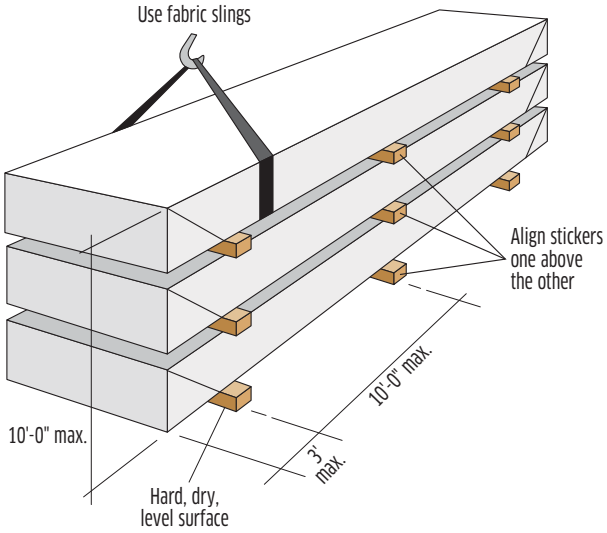
Do not use visually damaged products without first checking with your local PWT™ distributor or sales office.

DON'T put holes too close to supports.  Refer to hole chart for correct location.	**DON'T** overcut hole and damage flange. 	**DON'T** make hole with hammer unless knock-out is provided.  **DON'T** hammer on flange and damage joist.	**DON'T** cut or notch flange.  **DON'T** drill flange.
DON'T cut flange for pipes. 	**DON'T** use 16d nails.  Refer to Joist End Nailing detail for correct sizes and locations.	**DON'T** cut beyond inside edge of bearing. 	**DON'T** support I-Joist on web. 

Handling and Storage

HANDLING AND STORAGE GUIDELINES

- WARNING: Failure to follow proper procedures for handling, storage and installation could result in unsatisfactory performance, unsafe structures and possible collapse.
- Keep PWT™ products dry. These products are intended to resist the effects of moisture on structural performance from normal construction delays but are not intended for permanent exposure to the weather.
- Unload products carefully, by lifting. Support the bundles to reduce excessive bowing. Individual products should be handled in a manner which prevents physical damage during measuring, cutting, erection, etc. I-Joists shall be handled vertically and not flatwise.
- Keep products stored in wrapped and strapped bundles, stacked no more than 10' high. Support and separate bundles with 2 x 4 (or larger) stickers spaced no more than 10' apart. Keep stickers in line vertically.
- Product must not be stored in contact with the ground, or have prolonged exposure to the weather.
- Use forklifts and cranes carefully to avoid damaging product.
- Do not use a visually damaged product. Call your local PWT distributor for assistance when damaged products are encountered.
- For satisfactory performance, PWT I-Joists and LVL must be used under dry, covered and well-ventilated interior conditions in which the average equilibrium moisture content (MC) of lumber is 15% or less over a year and does not exceed 19% at any time.
- For built-up members, PWT I-Joists and LVL shall be dry before nailing or bolting to avoid trapping moisture.
- PWT™ I-Joists and LVL shall not be used for unintended purposes such as ramps and planks.



PWT™
FOCUSED ON EWP

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pwtewp.com

For product catalog and complete warranty details or for more information on the full line of PWT products or the nearest distributor, visit pwtewp.com.

PWT products are manufactured at different locations in the United States and Canada.

PWT™ I-JOIST