



PREMIUM™ JOISTS

Featuring Premium™ Joists for Residential Structural Framing

- Strong, Straight, and Stable
- Easy to Glue, Nail, and Screw
- Minimum Shrinking and Swelling
- Reduced Framing Time and Jobsite Waste
- Spans for the Room Sizes You Want



#LB-4010 SPECIFIER'S GUIDE

www.iLevel.com
1.888.iLevel8 (1.888.453.8358)

 Weyerhaeuser



WELCOME TO iLEVEL

iLevel is an exciting new brand and business within Weyerhaeuser. iLevel brings the most innovative and trusted products for residential construction together under one roof. Within iLevel, you'll still find all the reliable, brand-name building products that you've been using—Trus Joist® engineered wood products and design software, Strukturwood® engineered panels, Performance Tested™ lumber, and more. But with iLevel, you'll work with only one service-oriented supplier to get all of these products and the support you need to build smarter.

iLevel. A family of brand-name building products...a source for innovative ideas and solutions...a supplier that's simpler to do business with.

iLevel® Premium™ Joists: The Beauty and Simplicity of Wood, Without the Shrinking, Swelling, or Culling

The iLevel® Premium™ joist goes well beyond the industry standard to deliver a solid wood joist, kiln-dried to a low and consistent moisture content—which virtually eliminates differential shrinking or swelling.

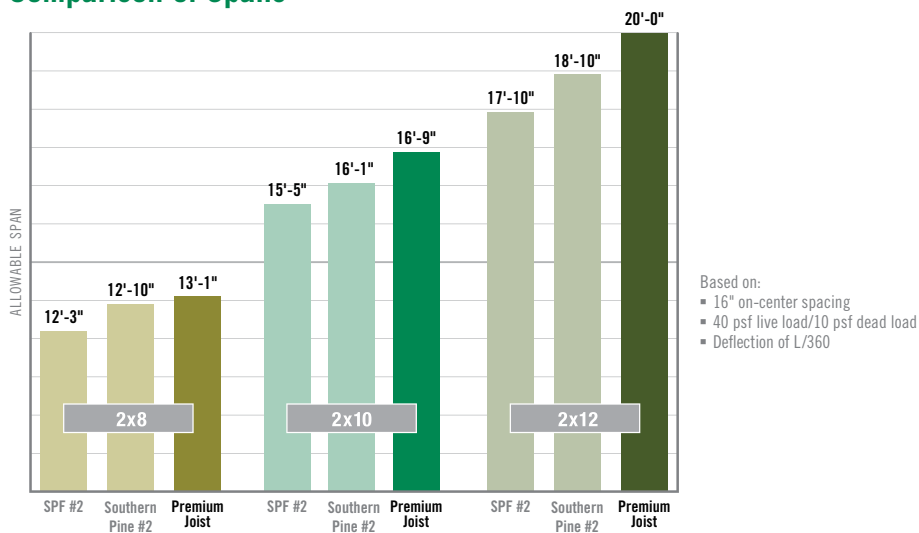
Each piece is also performance tested for fiber strength and density, and subjected to stringent grading criteria. Only lumber that meets strict M-29 criteria is used for Premium™ joists. That means strength, stability, easier installation, less culling, fewer callbacks, and consistent long-term performance. So why settle for the industry standard?

WHY USE iLEVEL® PREMIUM™ JOISTS?

Here's why—

- dimensional stability
- consistency in size
- quick installation
- dependable performance
- solid floor helps reduce vibration

Comparison of Spans



SP, M-29 Premium™ Joist Maximum Floor Spans

Nominal Joist Size	Joist Width	Joist Depth	40 psf live load, 10 psf dead load, L/360 ⁽¹⁾				40 psf live load, 10 psf dead load, L/480 ⁽²⁾				30 psf live load ⁽³⁾ , 10 psf dead load, L/360 ⁽¹⁾				30 psf live load ⁽³⁾ , 10 psf dead load, L/480 ⁽²⁾			
			12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
2x8	1½"	7¼"	14'-5"	13'-1"	12'-4"	11'-5"	13'-1"	11'-11"	11'-2"	10'-5"	15'-10"	14'-5"	13'-7"	12'-7"	14'-5"	13'-1"	12'-4"	11'-5"
2x10	1½"	9¼"	18'-5"	16'-9"	15'-9"	14'-7"	16'-9"	15'-2"	14'-4"	13'-3"	20'	18'-5"	17'-4"	16'-1"	18'-5"	16'-9"	15'-9"	14'-7"
2x12	1½"	11¼"	20'	20'	19'-2"	17'-9"	20'	18'-6"	17'-5"	16'-2"	20'	20'	20'	19'-7"	20'	20'	19'-2"	17'-9"

(1) Minimum criteria per code. For stricter deflection criteria, use shorter spans or the L/480 columns.

(2) Exceeds most code requirements.

(3) 30 psf live load is permitted in residential sleeping areas by some codes.

SP, M-29 Premium™ Joist Maximum Rafter Spans

Nominal Joist Size	Joist Width	Joist Depth	20 psf live load, 10 psf dead load, L/240 ⁽¹⁾				30 psf live load, 10 psf dead load, L/240 ⁽¹⁾			
			12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
2x8	1½"	7¼"	20'	18'-11"	17'-9"	16'-6"	18'-2"	16'-6"	15'-6"	14'-5"
2x10	1½"	9¼"	20'	20'	20'	20'	20'	20'	19'-10"	18'-5"
2x12	1½"	11¼"	20'	20'	20'	20'	20'	20'	20'	20'

(1) Based on a maximum deflection of L/240 for **Live Load** and 115% duration of load (snow areas).

▪ Spans shown are the maximum horizontal distance between supports.

General Notes for Floor, Rafter, and Ceiling Span Tables

- Values shown are for simple-span, uniformly loaded joists only.
- Maximum available span is 20'.
- Spans shown include bearing length. To convert to clear spans (assuming 1½" bearing), subtract 3".
- Joists shall bear directly on beams, girders, ledgers, or loadbearing walls or be supported by hangers or framing anchors.
- Minimum bearing: 1½" on wood or steel, 3" on masonry. Bearing across full joist width is required.
- Provide lateral restraint at the end of each joist by fastening to a rim, band joist, header, or other member or by using full-height blocking between floor joist ends.
- Changes in overall building design must be reviewed by the engineer or architect of record.

SP, M-29 Premium™ Joist Maximum Ceiling Spans

Nominal Joist Size	Joist Width	Joist Depth	20 psf live load, 10 psf dead load, L/240 ⁽¹⁾				10 psf live load, 5 psf dead load, L/240 ⁽¹⁾			
			12" o.c.	16" o.c.	19.2" o.c.	24" o.c.	12" o.c.	16" o.c.	19.2" o.c.	24" o.c.
2x8	1½"	7¼"	20'	18'-11"	17'-9"	16'-2"	20'	20'	20'	20'
2x10	1½"	9¼"	20'	20'	20'	20'	20'	20'	20'	20'
2x12	1½"	11¼"	20'	20'	20'	20'	20'	20'	20'	20'

(1) Based on live load deflection of L/240.

M-29 Premium™ Joist Beam or Header Allowable Loads (PLF)

Span ⁽¹⁾	Condition ⁽²⁾	1½" Width			3" Width (2-ply)			4½" Width (3-ply)			6" Width (4-ply)		
		2x8	2x10	2x12	2x8	2x10	2x12	2x8	2x10	2x12	2x8	2x10	2x12
4'	Total Load	882	1,336	1,745	1,764	2,673	3,491	2,902	4,010	5,237	3,870	5,346	6,982
	Live Load	882	1,336	1,745	1,764	2,673	3,491	2,902	4,010	5,237	3,870	5,346	6,982
	Min. End Bearing (in.)	3.00	4.50	6.00	3.00	4.50	6.00	3.00	4.50	6.00	3.00	4.50	6.00
6'	Total Load	412	654	936	825	1,309	1,872	1,416	2,235	3,029	1,888	2,981	4,039
	Live Load	412	654	936	825	1,309	1,872	1,416	2,235	3,029	1,888	2,981	4,039
	Min. End Bearing (in.)	1.50	3.00	4.50	1.50	3.00	4.50	3.00	3.00	4.50	3.00	3.00	4.50
8'	Total Load	235	378	550	471	757	1,100	810	1,299	1,882	1,081	1,732	2,510
	Live Load	225	378	550	451	757	1,100	674	1,299	1,882	899	1,732	2,510
	Min. End Bearing (in.)	1.50	3.00	3.00	1.50	3.00	3.00	1.50	3.00	4.50	1.50	3.00	4.50
10'	Total Load	151	244	358	302	489	716	517	842	1,230	690	1,122	1,640
	Live Load	117	239	358	234	479	716	350	715	1,230	467	954	1,640
	Min. End Bearing (in.)	1.50	1.50	3.00	1.50	1.50	3.00	1.50	3.00	3.00	1.50	3.00	3.00
12'	Total Load	99	170	250	199	340	500	299	586	862	399	782	1,149
	Live Load	68	140	249	136	280	499	205	419	744	273	559	992
	Min. End Bearing (in.)	1.50	1.50	3.00	1.50	1.50	3.00	1.50	1.50	3.00	1.50	1.50	3.00
14'	Total Load	62	124	184	124	249	368	187	390	635	249	520	847
	Live Load	43	89	158	86	178	317	129	266	474	173	355	632
	Min. End Bearing (in.)	1.50	1.50	3.00	1.50	1.50	3.00	1.50	1.50	3.00	1.50	1.50	3.00
16'	Total Load	41	86	140	82	173	281	123	260	468	164	346	624
	Live Load	29	60	107	58	120	214	87	180	320	116	240	427
	Min. End Bearing (in.)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
18'	Total Load	28	60	109	56	120	218	84	180	327	112	240	437
	Live Load	20	42	75	40	84	151	61	126	226	81	169	302
	Min. End Bearing (in.)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
20'	Total Load	19	43	78	39	86	157	59	129	236	79	172	315
	Live Load	14	30	55	29	61	110	44	92	166	59	123	221
	Min. End Bearing (in.)	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50

(1) Interpolation between spans is permitted.

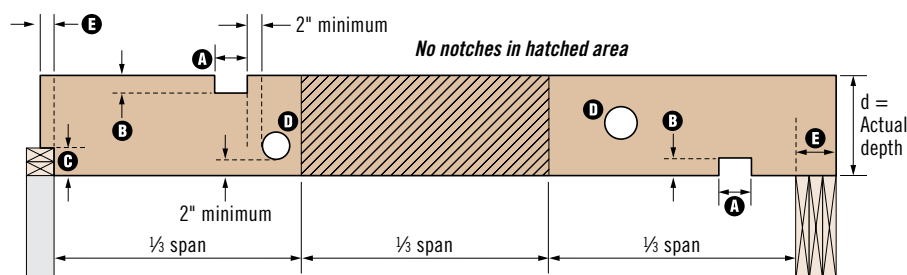
(2) Based on deflection criteria of L/240 for **Total Load** and L/360 for **Live Load** and 115% duration of load (snow areas).

- Allowable loads shown are the maximum uniform loads (plf) that can be applied to the beam in addition to its own weight, provided that the minimum end-bearing requirements are met.
- Beams and girders shall bear on loadbearing walls, piles, or concrete or masonry foundations.

For framing instructions, including recommended fastening schedules, please refer to the AF&PA Wood Frame Construction Manual or your applicable building code.

Premium™ joists are intended for dry-use applications

Allowable Notches and Holes



Nominal Joist Size	A	B	C	D	E	
	Maximum Notch Length not to exceed d/3	Maximum Notch Depth not to exceed d/6	Maximum End Notch Depth not to exceed d/4	Maximum Hole Diameter not to exceed d/3	Wood or Steel	Masonry
2x8	2 3/8"	1 3/16"	1 13/16"	2 3/8"	1 1/2"	3"
2x10	3 1/16"	1 1/2"	2 5/16"	3 1/16"	1 1/2"	3"
2x12	3 3/4"	1 7/8"	2 13/16"	3 3/4"	1 1/2"	3"

General Notes

- If the joist thickness is greater than 3 1/2", no notches are permitted on the tension side, except at ends.

Storage and Handling

In Warehouse

1. Store bundles on a hard and level surface in a covered shed and protect from weather. Avoid contact with water or exposure to direct sunlight.
2. Do not store joists in direct contact with the ground. All of our bundles come with corner protection under the strap, and with 2x3 dunnage to keep joists off the ground when breaking the bundles.
3. To avoid physical damage to joists, use care when handling bundles or individual components, especially when handling with forklifts or cranes.

At Job Site

1. Keep joists wrapped and covered during transit from lumberyard to the job site.
2. Do not open bundles until the time of installation.
3. To maintain the low moisture content of bundles after breaking them, rewrap the unused part and make sure all four sides and the top are covered.
4. Keep joists off of the ground and covered at the job site.

Safety

1. Use care when handling joists to prevent injuries.
2. Do not use joists as ramps, planks, etc. Use only as directed in this guide.
3. After sheathing, do not overload joists with construction material exceeding the design loads.

CONTACT US

1.888.iLevel8 (1.888.453.8358)

www.iLevel.com

iLevel@weyerhaeuser.com

2910 East Amity Road

Boise, ID 83716

208.364.3600

P.O. Box 8449

Boise, ID 83707-2449

DEALER INFORMATION

December 2007
Reorder LB-4010

This document supersedes all previous versions. If this is more than one year old, contact your dealer or iLevel rep.
PNW

▲Weyerhaeuser®, iLevel®, Structurwood®, and Trus Joist® are registered trademarks and All In One™, Performance Tested™, and Premium™ are trademarks of Weyerhaeuser. © 2007 Weyerhaeuser Company. All rights reserved. Printed in the USA.