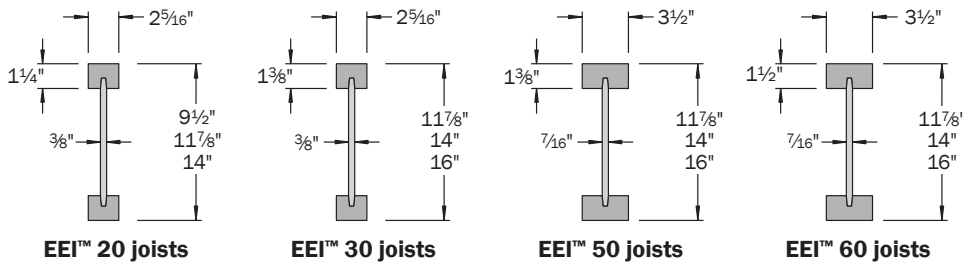


# EverEdge™ Series I-Joist



Weyerhaeuser EverEdge™ Series I-Joists are engineered to provide both strength and consistency—features that help builders save on installation time and reduce both jobsite waste and customer callbacks.

Visit [weyerhaeuser.com/everedge](http://weyerhaeuser.com/everedge) for more information.



## EEI™ Joist Spans

Depth	EEI™	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
		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.
<b>L/480 Live Load Deflection</b>									
9½"	20	18'-3"	16'-8"	15'-9"	14'-8"	18'-3"	16'-8"	15'-9"	14'-5"
11⅞"	20	21'-8"	19'-10"	18'-8"	17'-5"	21'-8"	19'-10"	18'-2"	16'-3" <sup>[1]</sup>
	30	22'-11"	20'-11"	19'-8"	18'-4"	22'-11"	20'-11"	19'-8"	17'-10" <sup>[1]</sup>
	50	26'-1"	23'-8"	22'-4"	20'-9"	26'-1"	23'-8"	22'-4"	20'-9" <sup>[1]</sup>
	60	26'-2"	23'-9"	22'-5"	20'-10"	26'-2"	23'-9"	22'-5"	20'-10"
14"	20	24'-8"	22'-6"	21'-2"	19'-4" <sup>[1]</sup>	24'-8"	21'-8"	19'-9"	17'-6" <sup>[1]</sup>
	30	26'-0"	23'-8"	22'-4"	20'-9" <sup>[1]</sup>	26'-0"	23'-8"	22'-4" <sup>[1]</sup>	17'-10" <sup>[1]</sup>
	50	29'-6"	26'-10"	25'-4"	23'-6"	<b>29'-6"</b>	<b>26'-10"</b>	25'-4" <sup>[1]</sup>	20'-11" <sup>[1]</sup>
	60	29'-8"	27'-0"	25'-5"	23'-7"	<b>29'-8"</b>	<b>27'-0"</b>	25'-5"	23'-2" <sup>[1]</sup>
16"	30	28'-9"	26'-2"	24'-8" <sup>[1]</sup>	21'-5" <sup>[1]</sup>	<b>28'-9"</b>	26'-2" <sup>[1]</sup>	22'-4" <sup>[1]</sup>	17'-10" <sup>[1]</sup>
	50	32'-8"	29'-8"	28'-0"	25'-2" <sup>[1]</sup>	<b>29'-8"</b>	<b>29'-8"</b>	26'-3" <sup>[1]</sup>	20'-11" <sup>[1]</sup>
	60	32'-10"	29'-10"	28'-1"	26'-1"	<b>32'-10"</b>	<b>29'-10"</b>	<b>28'-1"<sup>[1]</sup></b>	23'-2" <sup>[1]</sup>
<b>L/360 Live Load Deflection</b>									
9½"	20	20'-3"	18'-6"	17'-5"	15'-10"	<b>20'-3"</b>	17'-8"	16'-2"	14'-5"
11⅞"	20	24'-0"	21'-10"	19'-11"	17'-9"	<b>23'-0"</b>	19'-11"	18'-2"	16'-3" <sup>[1]</sup>
	30	25'-4"	23'-2"	21'-10"	20'-4" <sup>[1]</sup>	<b>25'-4"</b>	<b>23'-2"</b>	<b>21'-10"<sup>[1]</sup></b>	17'-10" <sup>[1]</sup>
	50	28'-10"	26'-3"	24'-9"	23'-0"	<b>28'-10"</b>	<b>26'-3"</b>	<b>24'-9"</b>	20'-11" <sup>[1]</sup>
	60	28'-11"	26'-4"	24'-10"	23'-1"	<b>28'-11"</b>	<b>26'-4"</b>	<b>24'-10"</b>	<b>23'-1"<sup>[1]</sup></b>
14"	20	27'-3"	23'-9"	21'-8"	19'-4" <sup>[1]</sup>	25'-0"	21'-8"	19'-9"	17'-6" <sup>[1]</sup>
	30	28'-9"	26'-3"	24'-9" <sup>[1]</sup>	21'-5" <sup>[1]</sup>	<b>28'-9"</b>	<b>26'-3"<sup>[1]</sup></b>	22'-4" <sup>[1]</sup>	17'-10" <sup>[1]</sup>
	50	32'-8"	29'-9"	28'-0"	25'-2" <sup>[1]</sup>	<b>32'-8"</b>	<b>29'-9"</b>	<b>26'-3"<sup>[1]</sup></b>	20'-11" <sup>[1]</sup>
	60	32'-10"	29'-11"	28'-2"	26'-2"	<b>32'-10"</b>	<b>29'-11"</b>	<b>28'-2"<sup>[1]</sup></b>	23'-2" <sup>[1]</sup>
16"	30	31'-10"	29'-0"	26'-10" <sup>[1]</sup>	21'-5" <sup>[1]</sup>	<b>31'-10"</b>	<b>26'-10"<sup>[1]</sup></b>	22'-4" <sup>[1]</sup>	17'-10" <sup>[1]</sup>
	50	36'-1"	32'-11"	31'-0" <sup>[1]</sup>	25'-2" <sup>[1]</sup>	<b>36'-1"</b>	<b>31'-6"<sup>[1]</sup></b>	26'-3" <sup>[1]</sup>	20'-11" <sup>[1]</sup>
	60	36'-4"	33'-1"	31'-2"	27'-10" <sup>[1]</sup>	<b>36'-4"</b>	<b>33'-1"</b>	<b>29'-0"<sup>[1]</sup></b>	23'-2" <sup>[1]</sup>

[1] Web stiffeners are required at intermediate supports of continuous-span joists when the intermediate bearing length is less than 5¼" and the span on either side of the intermediate bearing is greater than the following spans:

EEI™	40 PSF Live Load / 10 PSF Dead Load				40 PSF Live Load / 20 PSF Dead Load			
	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.
20	Not Req.	Not Req.	Not Req.	19'-2"	Not Req.	Not Req.	19'-11"	15'-11"
30			24'-5"	19'-6"		20'-4"		
50			29'-10"	23'-10"		19'-10"	19'-10"	
60			Not Req.	26'-8"		Not Req.	27'-9"	22'-2"

• Long-term deflection under dead load, which includes the effect of creep, has not been considered. **Bold italic** spans reflect initial dead load deflection exceeding 0.33".

## General Notes

- Tables are based on:
  - Uniform loads.
  - More restrictive of simple or continuous span.
  - Clear distance between supports
  - Minimum bearing length of 1¾" end (no web stiffeners) and 3½" intermediate.
- Assumed composite action with a single layer of 24" on-center span-rated, glue-nailed floor panels for deflection only. Spans shall be reduced 6" when floor panels are nailed only.
- Refer to PFS-TECO Research Report 1060 for more information.

Distributed by



U.S. LUMBER

## EverEdge™ Series LVL

Weyerhaeuser EverEdge™ laminated veneer lumber (LVL) offers an economical and reliable solution for header and beam applications. Our manufacturing process removes many of the natural inconsistencies found in wood to provide members that are consistent in size and strength. EverEdge™ LVL can also be easily built up on site to reduce heavy lifting.

Visit [weyerhaeuser.com/everedge](http://weyerhaeuser.com/everedge) for more information.

### Allowable Design Stresses<sup>[1][2]</sup> (100% Load Duration)

Shear Modulus of Elasticity (psi)	Modulus of Elasticity (psi)	Adjusted Modulus of Elasticity <sup>[3]</sup> (psi)	Flexural Stress <sup>[4]</sup> (psi)	Tension Stress <sup>[5]</sup> (psi)	Compression Perpendicular to Grain <sup>[6]</sup> (psi)	Compression Parallel to Grain (psi)	Horizontal Shear Parallel to Grain (psi)	Equivalent Specific Gravity <sup>[7]</sup>
G	E	E <sub>min</sub>	F <sub>b</sub>	F <sub>t</sub>	F <sub>cL</sub>	F <sub>c</sub>	F <sub>v</sub>	SG
125,000	2.0 x 10 <sup>6</sup>	1,016,535	2,900	1,555	800	2,510	285	0.5

[1] For product in beam orientation, unless otherwise noted.

[2] Unless noted otherwise, the design stress is permitted to be adjusted for duration of load in accordance with the applicable building code.

[3] Reference modulus of elasticity for beam and column stability calculations, per NDS®.

[4] For 12" depth; for other depths multiply F<sub>b</sub> by  $\left[\frac{12}{d}\right]^{0.136}$

[5] F<sub>t</sub> has been adjusted to reflect the volume effects for most standard applications.

[6] F<sub>cL</sub> may not be increased for duration of load.

[7] For lateral connection design only.



### EverEdge™ LVL Sizes

Width: 1¾"

Depths: 5½", 7¼", 9¼", 9½", 11¼", 11⅞", 14", 16", 18", 20", 24"

### General Assumptions for EverEdge™ Beams and Headers:

- Lateral support is required at bearing and along the span at 24" on-center, maximum.
- All members 7¼" and less in depth are restricted to a maximum deflection of 5/16".
- Beams that are 1¾" x 16" and deeper require multiple plies.
- No camber.
- Refer to PFS-TECO Research Report 1050 for more information.

## Rim Board

Weyerhaeuser Rim Board depths are sized to match EEI™ Joists, which means less cutting and material waste when they are used together. Uniform in size and available in 16-foot lengths, Weyerhaeuser Rim Board is fast and easy to install.

Visit [weyerhaeuser.com/everedge](http://weyerhaeuser.com/everedge) for more information.

### Allowable Design Stresses<sup>[1][2]</sup> (100% Load Duration)

Modulus of Elasticity (psi)	Adjusted Modulus of Elasticity <sup>[3]</sup> (psi)	Flexural Stress <sup>[4]</sup> (psi)	Compression Perpendicular to Grain <sup>[4]</sup> (psi)	Horizontal Shear Parallel to Grain (psi)	Equivalent Specific Gravity, Face Grain <sup>[5][6]</sup>
E	E <sub>min</sub>	F <sub>b</sub>	F <sub>cL</sub>	F <sub>v</sub>	SG
0.6 x 10 <sup>6</sup>	305,000	700	660	395	0.38

[1] Unless otherwise noted, adjustment to the design stresses for duration of load are permitted in accordance with the applicable code.

[2] 1½" Weyerhaeuser Rim Board is recognized as an acceptable rim board material for use in conventional construction: Maximum lateral transfer capacity is 220 plf and maximum span is 8 feet.

[3] Reference modulus of elasticity for beam and column stability calculations, per NDS®.

[4] F<sub>cL</sub> may not be increased for duration of load.

[5] For lateral connection design only.

[6] Specific gravity of 0.50 may be used for nails, screws, and bolts installed perpendicular to face and loaded perpendicular to grain.



### Rim Board Sizes and Vertical Load Transfer at Bearing<sup>(1)</sup>

Width	Depth	Uniform Load (plf)
1½"	9½"	4,860
	11⅞"	4,860
	14"	4,570
	16"	4,000

(1) Values may not be increased for Duration of Load.

- Refer to ICC-ES Report ESR-1387 for more information.

