

Table 3B. Glued Laminated Timber Beam Spans (L_B)¹ Supporting a Single Span of Joists with or without Overhangs.

Stress Class ²	Width ³	Depth ⁴	Joist Spans (L) Less Than or Equal to:						
			6'	8'	10'	12'	14'	16'	18'
Balanced or Unbalanced 20F-1.5E And Higher Grade Cedar	3-1/2"	9-1/2"	12'-2"	10'-6"	9'-4"	8'-6"	7'-10"	7'-4"	6'-11"
		11-7/8"	15'-2"	13'-1"	11'-8"	10'-8"	9'-10"	9'-2"	8'-8"
		14"	17'-10"	15'-5"	13'-9"	12'-7"	11'-7"	10'-10"	10'-2"
	5-1/4"	11-7/8"	18'-0" ⁵	16'-8"	14'-10"	13'-7"	12'-6"	11'-8"	11'-0"
		14"	18'-0" ⁵	18'-0" ⁵	17'-6"	15'-11"	14'-9"	13'-9"	13'-0"
		16"	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	16'-10"	15'-9"	14'-10"
Unbalanced 24F-1.8E Douglas Fir-Larch or Southern Pine	3-1/2"	9-1/2"	13'-11"	12'-1"	10'-9"	9'-10"	9'-1"	8'-6"	8'-0"
		11-7/8"	17'-5"	15'-1"	13'-5"	12'-3"	11'-4"	10'-7"	10'-0"
		14"	18'-0" ⁵	17'-9"	15'-10"	14'-5"	13'-4"	12'-6"	11'-9"
	5-1/4"	11-7/8"	18'-0" ⁵	18'-0" ⁵	17'-1"	15'-7"	14'-5"	13'-6"	12'-8"
		14"	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	17'-0"	15'-10"	14'-11"
		16"	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	17'-0"
Balanced 24F-1.8E Douglas Fir-Larch or Southern Pine	3-1/2"	9-1/2"	13'-11"	12'-7"	11'-8"	11'-0"	10'-5"	9'-11"	9'-7"
		11-7/8"	17'-5"	15'-10"	14'-8"	13'-9"	13'-1"	12'-6"	12'-0"
		14"	18'-0" ⁵	18'-0" ⁵	17'-4"	16'-3"	15'-5"	14'-9"	14'-2"
	5-1/4"	11-7/8"	18'-0" ⁵	18'-0" ⁵	17'-4"	16'-3"	15'-5"	14'-9"	14'-2"
		14"	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	17'-6"	16'-9"
		16"	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵	18'-0" ⁵

1. Assumes 40 psf live load, 10 psf dead load, L/360 simple span beam deflection limit, cantilever length/180 deflection limit. Glued laminated timber shall be of naturally durable species or treated with an oil-borne or water-borne preservative in accordance with AWPA U1. See MINIMUM REQUIREMENTS & LIMITATIONS. Spans for glued laminated timber beams not treated with oil-borne preservatives shall be multiplied by 0.89.

2. Preservative treated structural composite lumber of equal or greater capacity can be substituted.

3. Beam widths of 3-1/8" or wider can be used for the tabulated 3-1/2" width, and beam widths of 5-1/8" or wider can be used for the tabulated 5-1/4" width.

4. Beam depth must be equal to or greater than joist depth if joist hangers are used (see Figure 6, Option 3).

5. Beam span prescriptively limited to 18'-0" for footing design.