Trus Joist™
Weyerhaeuser

LIMIT STATES DESIGN NBCC

#TJ-9500 | SPECIFIER'S GUIDE

BEAMS, HEADERS, AND COLUMNS

Featuring Trus Joist® TimberStrand® LSL, Microllam® LVL, and Parallam® PSL

- Uniform and Predictable
- Minimal Bowing, Twisting, and Shrinking
- Strong and Straight
- Limited Product Warranty

Why Choose Trus Joist® Beams, Columns, and Headers?

- Reliable performance
- Consistent quality and dependable uniformity
- Flexible solutions for your beam and header needs
- Backed by a limited product warranty

Using advanced technology, Weyerhaeuser manufactures engineered lumber that is consistently straight and strong, and that resists bowing, twisting, and shrinking. That means less waste, easier installation, and higher design values for starters; plus fewer callbacks, shorter cycle times, more design flexibility, and lower overall installed cost in the end. Trus Joist® TimberStrand® LSL, Microllam® LVL, and Parallam® PSL are structural solutions you can count on—guaranteed.

The products in this guide are readily available through our nationwide network of distributors and dealers. For more information on other applications or other Trus Joist® products, contact your Weyerhaeuser representative.

This guide is for use with NBCC 2010, NBCC 2015, CSA 086-09 and CSA 086-14.

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This guide features Trus Joist® engineered lumber in the following widths and depths:

TimberStrand® LSL

1.55E TimberStrand® LSL sizes:
Widths: 1¾" and 3½"
Depths: 9½", 11⅞", 14", and 16"

1.3E TimberStrand® LSL header sizes:
Width: 3½"
Depths: 5½" and 7¼"

1.3E TimberStrand® LSL column and post sizes:
3½" x 3½" 3½" x 4⅜" 3½" x 5½" 3½" x 7¼"

Microllam® LVL

2.0E Microllam® LVL header and beam sizes:
Width: 1¾"
Depths: 9¼", 9½", 11¼", 11⅞", 14", 16", 18", and 20"

Parallam® PSL

2.0E Parallam® PSL header and beam sizes:
Widths: 3½", 5¼", and 7"
Depths: 9½", 11⅞", 14", 16", and 18"

1.8E Parallam® PSL column and post sizes:
3½" x 3½" 3½" x 5¼" 3½" x 7" 5¼" x 5¼" 5¼" x 7" 7" x 7"

Grades shown are available in Eastern Canada; some sizes may not be available in your region.

Trus Joist® TimberStrand® Laminated Strand Lumber (LSL)

- One-piece members reduce labour time
- Every piece is straight and strong
- Unique properties allow you to drill larger holes through 1.55E TimberStrand® LSL. See **Allowable Holes** on page 14.

TimberStrand® LSL Grade Verification

TimberStrand® LSL is available in more than one grade. The product is stamped with its grade information, as shown in the examples below. With 1.55E TimberStrand® LSL, larger holes can be drilled through the beam.

Trus Joist TimberStrand® LSL 1.3E ICCES ESR-1387 CCMC 12627-R SFI Certified Sourcing SFI-00008 PFS 0572 Made in Canada 09-15-11 02 03:20

Trus Joist TimberStrand® LSL Round Hole Zone See Guidelines 1.55E ICCES ESR-1387 CCMC 12627-R SFI Certified Sourcing SFI-00008 PFS 0572 Made in Canada 09-15-11 02 03:20

Actual stamps shown.

Code Evaluations: See CCMC 12627-R

Trus Joist® Microllam® Laminated Veneer Lumber (LVL)

- Can easily be built up on site to reduce heavy lifting
- Offers reliable and economical solutions for beam and header applications
- Manufacturing process minimizes many of the natural inconsistencies found in wood
- Available in some regions with a Watershed™ overlay for on-site weather protection

Code Evaluations: See CCMC 08675-R

Trus Joist® Parallam® Parallel Strand Lumber (PSL)

- Allows long spans for open floor plans without intermediate posts or columns
- Has warm, unique grain that is perfect for applications with exposed beams
- Provides ideal solutions for cantilever and multi-span applications
- Solid sections save time on site assembly
- Available in some regions with preservative treatment for exterior applications

Code Evaluations: See CCMC 11161-R

Factored Resistances[1] (Standard Term)

Grade	Width	Design Property	Depth										
			5½"	5½" Plank Orientation	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"
TimberStrand® LSL													
1.3E	3½"	Factored Moment Resistance (ft-lbs)	4,465	2,960	7,565								
		Factored Shear Resistance (lbs)	9,010	3,235	11,875								
		Moment of Inertia (in.⁴)	49	20	111								
		Weight (plf)	5.6	5.6	7.4								
1.55E	1¾"	Factored Moment Resistance (ft-lbs)					8,665		13,260	18,155	23,425		
		Factored Shear Resistance (lbs)					5,735		7,170	8,455	9,660		
		Moment of Inertia (in.⁴)					125		244	400	597		
		Weight (plf)					5.2		6.5	7.7	8.8		
	3½"	Factored Moment Resistance (ft-lbs)					17,325		26,525	36,310	46,850		
		Factored Shear Resistance (lbs)					11,470		14,340	16,905	19,320		
		Moment of Inertia (in.⁴)					250		488	800	1,195		
		Weight (plf)					10.4		13.0	15.3	17.5		
Microllam® LVL													
2.0E	1¾"	Factored Moment Resistance (ft-lbs)				9,315	9,790	13,420	14,845	20,175	25,875	32,230	39,220
		Factored Shear Resistance (lbs)				5,150	5,285	6,260	6,610	7,790	8,905	10,015	11,130
		Moment of Inertia (in.⁴)				115	125	208	244	400	597	851	1,167
		Weight (plf)				4.7	4.8	5.7	6.1	7.1	8.2	9.2	10.2
Parallam® PSL													
2.0E	3½"	Factored Moment Resistance (ft-lbs)					21,720		33,105	45,180	58,145	72,635	
		Factored Shear Resistance (lbs)					10,775		13,465	15,875	18,145	20,410	
		Moment of Inertia (in.⁴)					250		488	800	1,195	1,701	
		Weight (plf)					10.4		13.0	15.3	17.5	19.7	
	5¼"	Factored Moment Resistance (ft-lbs)					32,580		49,660	67,775	87,220	108,950	
		Factored Shear Resistance (lbs)					16,160		20,200	23,815	27,215	30,620	
		Moment of Inertia (in.⁴)					375		733	1,201	1,792	2,552	
		Weight (plf)					15.6		19.5	23.0	26.3	29.5	
	7"	Factored Moment Resistance (ft-lbs)					43,440		66,215	90,365	116,290	145,270	
		Factored Shear Resistance (lbs)					21,545		26,935	31,750	36,290	40,825	
		Moment of Inertia (in.⁴)					500		977	1,601	2,389	3,402	
		Weight (plf)					20.8		26.0	30.6	35.0	39.4	

(1) For product in beam orientation, unless otherwise noted.

Some sizes may not be available in your region.

DESIGN PROPERTIES

Specified Strengths[1] and Moduli of Elasticity (Standard Term)

Grade	Orientation	G Shear Modulus of Elasticity (psi)	E Modulus of Elasticity[2] (psi)	f_b Flexural Stress[3] (psi)	f_t Tension Stress[4] (psi)	$f_{c\perp}$ Compression Perpendicular to Grain[5] (psi)	$f_{c\parallel}$ Compression Parallel to Grain (psi)	f_v Horizontal Shear Parallel to Grain (psi)	SG Equivalent Specific Gravity[6]
TimberStrand® LSL									
1.3E	Beam/Column	81,250	1.3×10^6	3,140	1,985	1,295	2,930	780	0.50[7]
	Plank	81,250	1.3×10^6	3,510[8]	–	1,215	2,930	280	0.50[7]
1.55E	Beam	96,875	1.55×10^6	4,295	1,975[9]	1,635	3,465	575[9]	0.50[7]
Microllam® LVL									
2.0E	Beam	125,000	2.0×10^6	4,805	2,870	1,365	4,005	530	0.50
Parallam® PSL									
1.8E	Column	112,500	1.8×10^6	4,435[10]	3,245	1,085[10]	3,990	355[10]	0.50
2.0E	Beam	125,000	2.0×10^6	5,360	3,750	1,365	4,630[11]	540	0.50

(1) To obtain factored resistances, apply the appropriate formulae from CSA O86 to the specified strengths shown.

(2) To properly calculate deflections for the full range of typical SCL span and loading applications, bending and shear deflection must be considered. Use the following equation for simple span, uniformly loaded beams:

$$\Delta = \frac{270\,wL^4}{Ebd^3} + \frac{28.8\,wL^2}{Ebd}$$

Where: Δ = deflection (in.), w = uniform load (plf), L = span (feet), b = beam thickness (in.), d = beam depth (in.), E = modulus of elasticity (psi)

For other span and loading conditions, use engineering mechanics to account for both bending and shear deflection or use ForteWEB™ software.

(3) For 12" depth. For other depths, multiply f_b by the appropriate factor as follows:
– TimberStrand® LSL $\left[\frac{12}{d}\right]^{0.092}$ – Microllam® LVL $\left[\frac{12}{d}\right]^{0.136}$ – Parallam® PSL $\left[\frac{12}{d}\right]^{0.111}$

(4) f_t has been adjusted to reflect the volume effects for most standard applications.

(5) $f_{c\perp}$ shall not be increased for duration of load.

(6) For lateral connection design only.

(7) Specific gravity of 0.58 may be used for bolts installed perpendicular to face and loaded perpendicular to grain.

(8) Values are for thicknesses up to 3½".

(9) Value accounts for large hole capabilities. See **Allowable Holes** on page 14.

(10) Value shown is for plank orientation.

(11) For column applications, use a specified strength of 800 psi. Alternatively, refer to CCMC 11161-R, Table 4.4.1, footnote 9.

General Assumptions for Products Shown in this Guide

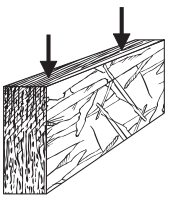
- Specified strengths and factored resistances are based on Limit States Design per CSA O86.
- Lateral support is required at bearing and along the span at 24" on-centre, maximum.
- Bearing lengths are based on each product's bearing resistance for applicable grade and orientation.
- All members 7¼" and less in depth are restricted to a maximum deflection of 5/16" (for window and header installation).
- Beams that are 1¾" x 16" and deeper require multiple plies. Some exceptions allowed when using Weyerhaeuser software.
- No camber.
- Beams and columns must remain straight to within $^{5L^2/4608}$ (in.) of true alignment. L is the unrestrained length of the member in feet.

For applications not covered in this guide, contact your Weyerhaeuser representative.

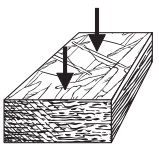
See pages 16–18 for fastening multiple-member beams.

TimberStrand® LSL, Microllam® LVL, and untreated Parallam® PSL are intended for dry-use applications

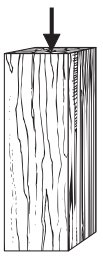
Beam Orientation



Plank Orientation



Column Orientation



PRODUCT STORAGE

Protect product from sun and water

CAUTION:
Wrap is slippery when wet or icy

Align stickers (2x3 or larger) directly over support blocks

Use support blocks (6x6 or larger) at 10' on-centre to keep bundles out of mud and water

How to Use This Table

1. Calculate the factored and unfactored total load (TL) (neglect beam weight) and the unfactored live load (LL) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (centre-to-centre of bearing).
3. Scan horizontally to find the proper width and a depth that has a capacity that meets or exceeds actual loads.
4. Review bearing length requirements to ensure adequacy.

*Also see **General Notes** on page 7.*

TimberStrand® LSL: Floor and/or Snow—Standard Term (PLF)

Span	Condition	1.3E Grade		
		3½" Width		5½" Plank Orientation
		5½"	7¼"	3½"
4'	Unfactored Resistance (LL)	1,215	2,476	546
	Unfactored Resistance (TL)	*	*	814
	Total Factored Resistance	2,225	3,772	1,457
	Min. End/Int. Bearing (in.)	1.5/3.5	2.1/5.2	1.5/3.5
5'	Unfactored Resistance (LL)	662	1,398	287
	Unfactored Resistance (TL)	*	*	425
	Total Factored Resistance	1,421	2,411	938
	Min. End/Int. Bearing (in.)	1.5/3.5	1.7/4.2	1.5/3.5
6'	Unfactored Resistance (LL)	397	857	169
	Unfactored Resistance (TL)	590	*	248
	Total Factored Resistance	985	1,671	649
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.5
8'	Unfactored Resistance (LL)	173	384	72
	Unfactored Resistance (TL)	198	443	79
	Total Factored Resistance	551	936	362
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.5
9'-6"	Unfactored Resistance (LL)	103	231	42
	Unfactored Resistance (TL)	98	224	37
	Total Factored Resistance	388	661	255
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.5
10'	Unfactored Resistance (LL)	84	190	35
	Unfactored Resistance (TL)	79	182	29
	Total Factored Resistance	350	595	229
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.5
12'	Unfactored Resistance (LL)	41	93	
	Unfactored Resistance (TL)	35	85	
	Total Factored Resistance	241	410	
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	
14'	Unfactored Resistance (LL)		50	
	Unfactored Resistance (TL)		43	
	Total Factored Resistance		299	
	Min. End/Int. Bearing (in.)		1.5/3.5	
16'-6"	Unfactored Resistance (LL)		26	
	Unfactored Resistance (TL)		19	
	Total Factored Resistance		212	
	Min. End/Int. Bearing (in.)		1.5/3.5	
18'-6"	Unfactored Resistance (LL)			
	Unfactored Resistance (TL)			
	Total Factored Resistance			
	Min. End/Int. Bearing (in.)			
20'	Unfactored Resistance (LL)			
	Unfactored Resistance (TL)			
	Total Factored Resistance			
	Min. End/Int. Bearing (in.)			

* Indicates **Total Factored Resistance** value controls.

General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/360 live load (LL) and L/240 total load (TL).
- For a live load deflection limit of L/480, multiply **Unfactored Resistance (LL)** by 0.75. For a total load limit of L/180 multiply **Unfactored Resistance (TL)** by 1.33. The resulting loads must not exceed the **Total Factored Resistance** shown.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.

*Also see **How to Use This Table** on page 6 and **General Assumptions** on page 5.*

TimberStrand® LSL: Floor and/or Snow—Standard Term (PLF) *continued*

Span	Condition	1.55E Grade										
		1¾" Width			3½" Width				5¼" Width (2- or 3-ply)			
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	9½"	11⅞"	14"	16"
4'	Unfactored Resistance (LL)	*	*	*	*	*	*	*	*	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	3,350	4,738	5,140	6,701	9,477	10,278	10,278	10,052	14,215	15,417	15,417
	Min. End/Int. Bearing (in.)	2.9/7.3	4.1/10.4	4.5/11.3	2.9/7.3	4.1/10.4	4.5/11.3	4.5/11.3	2.9/7.3	4.1/10.4	4.5/11.3	4.5/11.3
5'	Unfactored Resistance (LL)	1,658	*	*	3,316	*	*	*	4,975	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	2,451	3,349	4,110	4,903	6,698	8,218	8,218	7,354	10,047	12,327	12,327
	Min. End/Int. Bearing (in.)	2.7/6.7	3.7/9.2	4.5/11.3	2.7/6.7	3.7/9.2	4.5/11.3	4.5/11.3	2.7/6.7	3.7/9.2	4.5/11.3	4.5/11.3
6'	Unfactored Resistance (LL)	1,048	*	*	2,097	*	*	*	3,146	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	1,918	2,589	3,262	3,837	5,178	6,524	6,845	5,756	7,767	9,787	10,267
	Min. End/Int. Bearing (in.)	2.5/6.3	3.4/8.5	4.3/10.7	2.5/6.3	3.4/8.5	4.3/10.7	4.5/11.3	2.5/6.3	3.4/8.5	4.3/10.7	4.5/11.3
8'	Unfactored Resistance (LL)	487	886	1,352	974	1,773	2,705	*	1,462	2,660	4,058	*
	Unfactored Resistance (TL)	725	*	*	1,451	*	*	*	2,177	*	*	*
	Total Factored Resistance	1,076	1,649	2,195	2,152	3,299	4,390	5,128	3,229	4,948	6,586	7,692
	Min. End/Int. Bearing (in.)	1.9/4.7	2.9/7.2	3.9/9.6	1.9/4.7	2.9/7.2	3.9/9.6	4.5/11.3	1.9/4.7	2.9/7.2	3.9/9.6	4.5/11.3
9'-6"	Unfactored Resistance (LL)	302	560	870	605	1,121	1,740	2,456	907	1,681	2,610	3,684
	Unfactored Resistance (TL)	448	*	*	897	*	*	*	1,346	*	*	*
	Total Factored Resistance	761	1,167	1,599	1,522	2,334	3,199	4,130	2,284	3,502	4,799	6,196
	Min. End/Int. Bearing (in.)	1.6/4	2.4/6.1	3.3/8.3	1.6/4	2.4/6.1	3.3/8.3	4.3/10.8	1.6/4	2.4/6.1	3.3/8.3	4.3/10.8
10'	Unfactored Resistance (LL)	261	487	760	523	974	1,520	2,154	785	1,462	2,280	3,232
	Unfactored Resistance (TL)	387	724	*	775	1,449	*	*	1,162	2,174	*	*
	Total Factored Resistance	686	1,052	1,442	1,373	2,105	2,885	3,725	2,059	3,158	4,328	5,588
	Min. End/Int. Bearing (in.)	1.5/3.8	2.3/5.8	3.2/7.9	1.5/3.8	2.3/5.8	3.2/7.9	4.1/10.2	1.5/3.8	2.3/5.8	3.2/7.9	4.1/10.2
12'	Unfactored Resistance (LL)	155	293	464	311	587	928	1,334	467	881	1,393	2,001
	Unfactored Resistance (TL)	228	434	688	456	868	1,377	*	685	1,302	2,066	*
	Total Factored Resistance	474	728	999	949	1,457	1,998	2,580	1,424	2,185	2,997	3,871
	Min. End/Int. Bearing (in.)	1.5/3.5	1.9/4.8	2.6/6.6	1.5/3.5	1.9/4.8	2.6/6.6	3.4/8.5	1.5/3.5	1.9/4.8	2.6/6.6	3.4/8.5
14'	Unfactored Resistance (LL)	99	189	302	199	379	605	877	299	569	907	1,316
	Unfactored Resistance (TL)	144	278	446	288	556	892	1,298	433	834	1,338	1,948
	Total Factored Resistance	347	533	731	694	1,066	1,462	1,890	1,041	1,599	2,194	2,835
	Min. End/Int. Bearing (in.)	1.5/3.5	1.7/4.1	2.3/5.7	1.5/3.5	1.7/4.1	2.3/5.7	2.9/7.3	1.5/3.5	1.7/4.1	2.3/5.7	2.9/7.3
16'-6"	Unfactored Resistance (LL)	61	118	189	123	236	379	555	185	354	569	832
	Unfactored Resistance (TL)	87	170	277	174	341	554	815	262	512	831	1,222
	Total Factored Resistance	248	381	523	496	763	1,047	1,354	744	1,144	1,571	2,032
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.9/4.8	1.5/3.5	1.5/3.5	1.9/4.8	2.5/6.2	1.5/3.5	1.5/3.5	1.9/4.8	2.5/6.2
18'-6"	Unfactored Resistance (LL)	44	84	136	88	169	273	401	132	254	410	601
	Unfactored Resistance (TL)	60	120	197	121	241	395	584	182	362	592	876
	Total Factored Resistance	196	301	414	392	603	829	1,073	588	905	1,244	1,609
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.7/4.3	1.5/3.5	1.5/3.5	1.7/4.3	2.2/5.5	1.5/3.5	1.5/3.5	1.7/4.3	2.2/5.5
20'	Unfactored Resistance (LL)		67	109	70	135	218	320	105	202	327	481
	Unfactored Resistance (TL)		94	156	94	189	312	463	142	284	468	695
	Total Factored Resistance		257	353	333	514	707	915	500	771	1,060	1,372
	Min. End/Int. Bearing (in.)		1.5/3.5	1.6/4	1.5/3.5	1.5/3.5	1.6/4	2/5.1	1.5/3.5	1.5/3.5	1.6/4	2/5.1

* Indicates **Total Factored Resistance** value controls.

How to Use This Table

1. Calculate the factored and unfactored total load (TL) (neglect beam weight) and the unfactored live load (LL) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (centre-to-centre of bearing).
3. Scan horizontally to find the proper width and a depth that has a capacity that meets or exceeds actual loads.
4. Review bearing length requirements to ensure adequacy.

*Also see **General Notes** on page 9.*

2.0E Microllam® LVL: Floor and/or Snow—Standard Term (PLF)

Span	Condition	1¾" Width					3½" Width (2-ply)					
		9¼"	9½"	11¼"	11⅞"	14"	9¼"	9½"	11¼"	11⅞"	14"	16"
6'	Unfactored Resistance (LL)	*	*	*	*	*	*	*	*	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	1,722	1,781	2,219	2,386	2,859	3,444	3,562	4,438	4,773	5,713	5,713
	Min. End/Int. Bearing (in.)	2.7/6.8	2.8/7.0	3.5/8.7	3.8/9.4	4.5/11.3	2.7/6.8	2.8/7.0	3.5/8.7	3.8/9.4	4.5/11.3	4.5/11.3
8'	Unfactored Resistance (LL)	585	629	992	*	*	1,169	1,258	1,985	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	1,159	1,218	1,534	1,640	2,024	2,318	2,436	3,068	3,280	4,047	4,279
	Min. End/Int. Bearing (in.)	2.4/6.1	2.6/6.4	3.2/8.1	3.4/8.6	4.3/10.6	2.4/6.1	2.6/6.4	3.2/8.1	3.4/8.6	4.3/10.6	4.5/11.3
9'-6"	Unfactored Resistance (LL)	362	390	624	723	*	724	781	1,248	1,447	*	*
	Unfactored Resistance (TL)	539	581	*	*	*	1,077	1,162	*	*	*	*
	Total Factored Resistance	820	862	1,182	1,308	1,624	1,640	1,724	2,365	2,616	3,248	3,600
	Min. End/Int. Bearing (in.)	2.1/5.1	2.2/5.4	3/7.4	3.3/8.2	4.1/10.1	2.1/5.1	2.2/5.4	3.0/7.4	3.3/8.2	4.1/10.1	4.5/11.3
10'	Unfactored Resistance (LL)	313	338	542	629	981	627	676	1,084	1,258	1,961	*
	Unfactored Resistance (TL)	465	502	*	*	*	931	1,004	*	*	*	*
	Total Factored Resistance	739	777	1,066	1,180	1,524	1,479	1,555	2,133	2,360	3,047	3,419
	Min. End/Int. Bearing (in.)	2.0/4.9	2.0/5.1	2.8/7.0	3.1/7.8	4.0/10.0	2.0/4.9	2.0/5.1	2.8/7.0	3.1/7.8	4.0/10.0	4.5/11.3
12'	Unfactored Resistance (LL)	186	201	326	379	599	372	402	651	758	1,198	1,722
	Unfactored Resistance (TL)	274	297	483	563	*	549	593	965	1,125	*	*
	Total Factored Resistance	512	538	738	817	1,112	1,023	1,076	1,477	1,634	2,224	2,846
	Min. End/Int. Bearing (in.)	1.6/4.1	1.7/4.3	2.3/5.9	2.6/6.5	3.5/8.8	1.6/4.1	1.7/4.3	2.3/5.9	2.6/6.5	3.5/8.8	4.5/11.3
14'	Unfactored Resistance (LL)	119	129	210	245	390	238	257	420	490	781	1,132
	Unfactored Resistance (TL)	174	188	309	361	*	348	376	618	723	*	*
	Total Factored Resistance	374	394	541	598	814	749	787	1,081	1,197	1,629	2,092
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.7	2.0/5.0	2.2/5.5	3.0/7.5	1.5/3.5	1.5/3.7	2.0/5.0	2.2/5.5	3.0/7.5	3.9/9.7
16'-6"	Unfactored Resistance (LL)	74	80	130	153	245	147	159	261	305	490	716
	Unfactored Resistance (TL)	106	115	190	223	361	212	229	380	446	721	*
	Total Factored Resistance	268	282	387	429	584	536	563	774	857	1,168	1,500
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.7/4.3	1.9/4.7	2.6/6.4	1.5/3.5	1.5/3.5	1.7/4.3	1.9/4.7	2.6/6.4	3.3/8.2
18'-6"	Unfactored Resistance (LL)	53	57	93	109	176	105	114	187	219	353	518
	Unfactored Resistance (TL)	74	81	134	158	258	148	161	269	316	515	760
	Total Factored Resistance	212	223	307	339	463	424	446	613	679	925	1,189
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.8	1.7/4.2	2.3/5.7	1.5/3.5	1.5/3.5	1.5/3.8	1.7/4.2	2.3/5.7	2.9/7.3
20'	Unfactored Resistance (LL)	42	45	74	87	141	84	90	149	174	282	414
	Unfactored Resistance (TL)	58	63	106	125	204	116	126	212	249	408	605
	Total Factored Resistance	180	190	261	289	395	361	380	522	579	789	1,015
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.1/5.3	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.1/5.3	2.7/6.8
24'	Unfactored Resistance (LL)			43	51	83	49	53	87	102	166	244
	Unfactored Resistance (TL)			59	70	117	64	69	119	141	234	350
	Total Factored Resistance			179	199	271	247	260	358	397	543	698
	Min. End/Int. Bearing (in.)			1.5/3.5	1.5/3.5	1.8/4.4	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.4	2.3/5.6
28'	Unfactored Resistance (LL)					53	31	33	55	65	105	156
	Unfactored Resistance (TL)					72	37	40	71	85	144	217
	Total Factored Resistance					197	178	188	260	288	394	508
	Min. End/Int. Bearing (in.)					1.5/3.8	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	1.9/4.8

* Indicates **Total Factored Resistance** value controls.

General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/360 live load (LL) and L/240 total load (TL).
- For a live load deflection limit of L/480, multiply **Unfactored Resistance (LL)** by 0.75. For a total load limit of L/180 multiply **Unfactored Resistance (TL)** by 1.33. The resulting loads must not exceed the **Total Factored Resistance** shown.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.

*Also see **How to Use This Table** on page 8 and **General Assumptions** on page 5.*

2.0E Microllam® LVL: Floor and/or Snow—Standard Term (PLF) *continued*

Span	Condition	3½" Width (2-ply)		5¼" Width (3-ply)							
		18"	20"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"
6'	Unfactored Resistance (LL)	*	*	*	*	*	*	*	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	5,713	5,713	5,166	5,343	6,656	7,159	8,569	8,569	8,569	8,569
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	2.7/6.8	2.8/7.0	3.5/8.7	3.8/9.4	4.5/11.3	4.5/11.3	4.5/11.3	4.5/11.3
8'	Unfactored Resistance (LL)	*	*	1,754	1,887	2,977	*	*	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	4,279	4,279	3,476	3,654	4,602	4,921	6,071	6,419	6,419	6,419
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	2.4/6.1	2.6/6.4	3.2/8.1	3.4/8.6	4.3/10.6	4.5/11.3	4.5/11.3	4.5/11.3
9'-6"	Unfactored Resistance (LL)	*	*	1,087	1,171	1,873	2,170	*	*	*	*
	Unfactored Resistance (TL)	*	*	1,616	1,742	*	*	*	*	*	*
	Total Factored Resistance	3,600	3,600	2,460	2,586	3,547	3,924	4,872	5,401	5,401	5,401
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	2.1/5.1	2.2/5.4	3.0/7.4	3.3/8.2	4.1/10.1	4.5/11.3	4.5/11.3	4.5/11.3
10'	Unfactored Resistance (LL)	*	*	940	1,014	1,626	1,887	2,942	*	*	*
	Unfactored Resistance (TL)	*	*	1,396	1,506	*	*	*	*	*	*
	Total Factored Resistance	3,419	3,419	2,218	2,332	3,199	3,540	4,571	5,129	5,129	5,129
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	2.0/4.9	2.0/5.1	2.8/7.0	3.1/7.8	4.0/10.0	4.5/11.3	4.5/11.3	4.5/11.3
12'	Unfactored Resistance (LL)	*	*	558	603	977	1,137	1,798	2,583	*	*
	Unfactored Resistance (TL)	*	*	823	890	1,448	1,688	*	*	*	*
	Total Factored Resistance	2,846	2,846	1,535	1,614	2,215	2,451	3,336	4,269	4,269	4,269
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	1.6/4.1	1.7/4.3	2.3/5.9	2.6/6.5	3.5/8.8	4.5/11.3	4.5/11.3	4.5/11.3
14'	Unfactored Resistance (LL)	1,561	*	357	386	629	735	1,171	1,698	2,342	*
	Unfactored Resistance (TL)	*	*	522	565	927	1,084	*	*	*	*
	Total Factored Resistance	2,437	2,437	1,123	1,181	1,622	1,795	2,443	3,138	3,655	3,655
	Min. End/Int. Bearing (in.)	4.5/11.3	4.5/11.3	1.5/3.5	1.5/3.7	2.0/5.0	2.2/5.5	3.0/7.5	3.9/9.7	4.5/11.3	4.5/11.3
16'-6"	Unfactored Resistance (LL)	996	1,331	221	239	391	458	735	1,074	1,493	1,996
	Unfactored Resistance (TL)	*	*	317	344	570	669	1,082	*	*	*
	Total Factored Resistance	1,871	2,064	804	845	1,162	1,286	1,752	2,250	2,807	3,096
	Min. End/Int. Bearing (in.)	4.1/10.2	4.5/11.3	1.5/3.5	1.5/3.5	1.7/4.3	1.9/4.7	2.6/6.4	3.3/8.2	4.1/10.2	4.5/11.3
18'-6"	Unfactored Resistance (LL)	723	971	158	171	280	328	529	777	1,084	1,456
	Unfactored Resistance (TL)	*	*	223	242	403	474	773	1,140	*	*
	Total Factored Resistance	1,484	1,808	636	668	920	1,018	1,388	1,784	2,226	2,712
	Min. End/Int. Bearing (in.)	3.6/9.1	4.4/11.1	1.5/3.5	1.5/3.5	1.5/3.8	1.7/4.2	2.3/5.7	2.9/7.3	3.6/9.1	4.4/11.1
20'	Unfactored Resistance (LL)	580	781	125	136	223	262	423	621	870	1,171
	Unfactored Resistance (TL)	851	*	174	189	318	374	612	907	1,277	*
	Total Factored Resistance	1,266	1,543	541	569	784	868	1,184	1,522	1,899	2,315
	Min. End/Int. Bearing (in.)	3.4/8.4	4.1/10.3	1.5/3.5	1.5/3.5	1.5/3.5	1.6/3.9	2.1/5.3	2.7/6.8	3.4/8.4	4.1/10.3
24'	Unfactored Resistance (LL)	344	466	73	79	130	153	248	367	516	698
	Unfactored Resistance (TL)	498	678	95	104	178	211	351	526	746	1,017
	Total Factored Resistance	872	1,064	371	390	538	596	814	1,048	1,308	1,596
	Min. End/Int. Bearing (in.)	2.8/7.0	3.4/8.6	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.8/4.4	2.3/5.6	2.8/7.0	3.4/8.6
28'	Unfactored Resistance (LL)	220	299	46	50	83	97	158	234	330	448
	Unfactored Resistance (TL)	311	428	55	60	107	127	215	326	467	641
	Total Factored Resistance	635	775	268	282	389	432	591	761	952	1,162
	Min. End/Int. Bearing (in.)	2.4/6.0	2.9/7.3	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.5	1.5/3.8	1.9/4.8	2.4/6.0	2.9/7.3

* Indicates **Total Factored Resistance** value controls.

How to Use This Table

1. Calculate the factored and unfactored total load (TL) (neglect beam weight) and the unfactored live load (LL) on the beam or header in pounds per linear foot (plf).
2. Select appropriate **Span** (centre-to-centre of bearing).
3. Scan horizontally to find the proper width and a depth that has a capacity that meets or exceeds actual loads.
4. Review bearing length requirements to ensure adequacy.

*Also see **General Notes** on page 11.*

2.0E Parallam® PSL: Floor and/or Snow—Standard Term (PLF)

Span	Condition	3½" Width					5¼" Width				
		9½"	11⅞"	14"	16"	18"	9½"	11⅞"	14"	16"	18"
8'	Unfactored Resistance (LL)	1,258	2,289	*	*	*	1,887	3,433	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*	*	*	*	*	*
	Total Factored Resistance	2,547	3,342	4,122	4,279	4,279	3,820	5,012	6,184	6,418	6,418
	Min. End/Int. Bearing (in.)	2.7/6.7	3.5/8.8	4.3/10.8	4.5/11.3	4,5/11.3	2.7/6.7	3.5/8.8	4.3/10.8	4.5/11.3	4.5/11.3
9'-6"	Unfactored Resistance (LL)	781	1,447	2,246	*	*	1,171	2,170	3,368	*	*
	Unfactored Resistance (TL)	1,161	*	*	*	*	1,741	*	*	*	*
	Total Factored Resistance	1,912	2,705	3,309	3,600	3,600	2,868	4,058	4,963	5,400	5,400
	Min. End/Int. Bearing (in.)	2.4/6.0	3.4/8.5	4.1/10.3	4.5/11.3	4.5/11.3	2.4/6.0	3.4/8.5	4.1/10.3	4.5/11.3	4.5/11.3
10'	Unfactored Resistance (LL)	676	1,258	1,961	*	*	1,014	1,887	2,942	*	*
	Unfactored Resistance (TL)	1,003	*	*	*	*	1,505	*	*	*	*
	Total Factored Resistance	1,725	2,544	3,104	3,419	3,419	2,587	3,816	4,656	5,129	5,129
	Min. End/Int. Bearing (in.)	2.3/5.7	3.3/8.4	4.1/10.2	4.5/11.3	4.5/11.3	2.3/5.7	3.3/8.4	4.1/10.2	4.5/11.3	4.5/11.3
12'	Unfactored Resistance (LL)	402	758	1,198	1,722	*	603	1,137	1,798	2,583	*
	Unfactored Resistance (TL)	592	1,124	*	*	*	889	1,687	*	*	*
	Total Factored Resistance	1,194	1,823	2,488	2,846	2,846	1,790	2,735	3,731	4,269	4,269
	Min. End/Int. Bearing (in.)	1.9/4.7	2.9/7.2	3.9/9.8	4.5/11.3	4.5/11.3	1.9/4.7	2.9/7.2	3.9/9.8	4.5/11.3	4.5/11.3
14'	Unfactored Resistance (LL)	257	490	781	1,132	1,561	386	735	1,171	1,698	2,342
	Unfactored Resistance (TL)	376	722	1,156	*	*	564	1,083	1,734	*	*
	Total Factored Resistance	874	1,335	1,825	2,351	2,436	1,310	2,003	2,738	3,527	3,654
	Min. End/Int. Bearing (in.)	1.6/4.1	2.5/6.2	3.4/8.4	4.3/10.9	4.5/11.3	1.6/4.1	2.5/6.2	3.4/8.4	4.3/10.9	4.5/11.3
16'-6"	Unfactored Resistance (LL)	159	305	490	716	996	239	458	735	1,074	1,493
	Unfactored Resistance (TL)	229	445	720	1,057	*	343	667	1,080	1,585	*
	Total Factored Resistance	625	957	1,309	1,687	2,064	938	1,435	1,963	2,530	3,096
	Min. End/Int. Bearing (in.)	1.5/3.5	2.1/5.2	2.9/7.2	3.7/9.2	4.5/11.3	1.5/3.5	2.1/5.2	2.9/7.2	3.7/9.2	4.5/11.3
18'-6"	Unfactored Resistance (LL)	114	219	353	518	723	171	328	529	777	1,084
	Unfactored Resistance (TL)	160	315	514	759	1,065	241	473	771	1,139	1,597
	Total Factored Resistance	495	758	1,037	1,337	1,673	742	1,136	1,555	2,006	2,510
	Min. End/Int. Bearing (in.)	1.5/3.5	1.9/4.7	2.6/6.4	3.3/8.2	4.1/10.3	1.5/3.5	1.9/4.7	2.6/6.4	3.3/8.2	4.1/10.3
20'	Unfactored Resistance (LL)	90	174	282	414	580	136	262	423	621	870
	Unfactored Resistance (TL)	125	249	407	604	850	188	373	611	906	1,275
	Total Factored Resistance	421	646	885	1,141	1,428	632	969	1,327	1,712	2,142
	Min. End/Int. Bearing (in.)	1.5/3.5	1.7/4.3	2.4/5.9	3.0/7.6	3.8/9.5	1.5/3.5	1.7/4.3	2.4/5.9	3.0/7.6	3.8/9.5
24'	Unfactored Resistance (LL)	53	102	166	244	344	79	153	248	367	516
	Unfactored Resistance (TL)	69	140	233	349	496	103	210	349	524	744
	Total Factored Resistance	289	444	608	786	984	433	665	913	1,179	1,476
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.6	2.0/4.9	2.5/6.3	3.2/7.9	1.5/3.5	1.5/3.6	2.0/4.9	2.5/6.3	3.2/7.9
28'	Unfactored Resistance (LL)	33	65	105	156	220	50	97	158	234	330
	Unfactored Resistance (TL)	40	84	143	216	310	59	126	214	324	465
	Total Factored Resistance	209	322	442	571	717	313	482	663	857	1,075
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.7/4.2	2.2/5.4	2.7/6.8	1.5/3.5	1.5/3.5	1.7/4.2	2.2/5.4	2.7/6.8
32'	Unfactored Resistance (LL)		44	71	105	149	34	65	106	158	223
	Unfactored Resistance (TL)		52	91	140	203	35	78	137	210	305
	Total Factored Resistance		242	334	432	543	235	364	501	649	814
	Min. End/Int. Bearing (in.)		1.5/3.5	1.5/3.7	1.9/4.8	2.4/5.9	1.5/3.5	1.5/3.5	1.5/3.7	1.9/4.8	2.4/5.9

* Indicates **Total Factored Resistance** value controls.

General Notes

- Table is based on:
  - Uniform loads (beam weight considered).
  - More restrictive of simple or continuous span.
  - Deflection criteria of L/360 live load (LL) and L/240 total load (TL).
- For a live load deflection limit of L/480, multiply **Unfactored Resistance (LL)** by 0.75. For a total load limit of L/180 multiply **Unfactored Resistance (TL)** by 1.33. The resulting loads must not exceed the **Total Factored Resistance** shown.
- For continuous spans, ratio of short span to long span should be 0.4 or greater to prevent uplift.

*Also see **How to Use This Table** on page 10 and **General Assumptions** on page 5.*

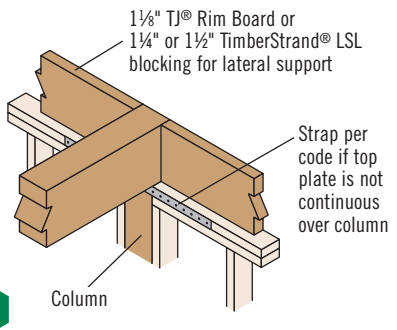
2.0E Parallam® PSL: Floor and/or Snow—Standard Term (PLF) *continued*

Span	Condition	7" Width				
		9½"	11⅞"	14"	16"	18"
8'	Unfactored Resistance (LL)	2,516	4,577	*	*	*
	Unfactored Resistance (TL)	*	*	*	*	*
	Total Factored Resistance	5,094	6,683	8,245	8,558	8,558
	Min. End/Int. Bearing (in.)	2.7/6.7	3.5/8.8	4.3/10.8	4.5/11.3	4.5/11.3
9'-6"	Unfactored Resistance (LL)	1,562	2,894	4,491	*	*
	Unfactored Resistance (TL)	2,322	*	*	*	*
	Total Factored Resistance	3,825	5,411	6,617	7,200	7,200
	Min. End/Int. Bearing (in.)	2.4/6.0	3.4/8.5	4.1/10.3	4.5/11.3	4.5/11.3
10'	Unfactored Resistance (LL)	1,352	2,516	3,923	*	*
	Unfactored Resistance (TL)	2,007	*	*	*	*
	Total Factored Resistance	3,449	5,087	6,208	6,838	6,838
	Min. End/Int. Bearing (in.)	2.3/5.7	3.3/8.4	4.1/10.2	4.5/11.3	4.5/11.3
12'	Unfactored Resistance (LL)	804	1,517	2,397	3,444	*
	Unfactored Resistance (TL)	1,185	2,249	*	*	*
	Total Factored Resistance	2,387	3,646	4,975	5,681	5,691
	Min. End/Int. Bearing (in.)	1.9/4.7	2.9/7.2	3.9/9.8	4.5/11.3	4.5/11.3
14'	Unfactored Resistance (LL)	515	980	1,562	2,265	3,123
	Unfactored Resistance (TL)	751	1,443	2,312	*	*
	Total Factored Resistance	1,747	2,670	3,650	4,703	4,872
	Min. End/Int. Bearing (in.)	1.6/4.1	2.5/6.2	3.4/8.4	4.3/10.9	4.5/11.3
16'-6"	Unfactored Resistance (LL)	319	611	980	1,432	1,991
	Unfactored Resistance (TL)	457	890	1,440	2,113	*
	Total Factored Resistance	1,250	1,913	2,617	3,373	4,128
	Min. End/Int. Bearing (in.)	1.5/3.5	2.1/5.2	2.9/7.2	3.7/9.2	4.5/11.3
18'-6"	Unfactored Resistance (LL)	228	438	706	1,036	1,446
	Unfactored Resistance (TL)	321	631	1,028	1,518	2,130
	Total Factored Resistance	989	1,515	2,074	2,675	3,346
	Min. End/Int. Bearing (in.)	1.5/3.5	1.9/4.7	2.6/6.4	3.3/8.2	4.1/10.3
20'	Unfactored Resistance (LL)	181	349	563	828	1,160
	Unfactored Resistance (TL)	251	497	814	1,208	1,700
	Total Factored Resistance	843	1,292	1,769	2,282	2,856
	Min. End/Int. Bearing (in.)	1.5/3.5	1.7/4.3	2.4/5.9	3.0/7.6	3.8/9.5
24'	Unfactored Resistance (LL)	105	204	331	489	688
	Unfactored Resistance (TL)	137	280	466	698	992
	Total Factored Resistance	577	887	1,217	1,571	1,968
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.6	2.0/4.9	2.5/6.3	3.2/7.9
28'	Unfactored Resistance (LL)	67	129	210	312	440
	Unfactored Resistance (TL)	79	168	285	432	620
	Total Factored Resistance	417	643	884	1,143	1,433
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.7/4.2	2.2/5.4	2.7/6.8
32'	Unfactored Resistance (LL)	45	87	142	210	298
	Unfactored Resistance (TL)	46	105	182	281	407
	Total Factored Resistance	313	485	668	865	1,086
	Min. End/Int. Bearing (in.)	1.5/3.5	1.5/3.5	1.5/3.7	1.9/4.8	2.4/5.9

* Indicates **Total Factored Resistance** value controls.

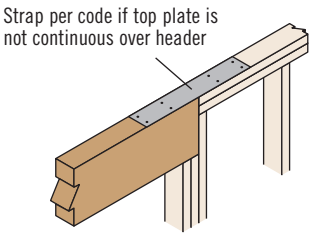
BEAM DETAILS

Bearing at Wall



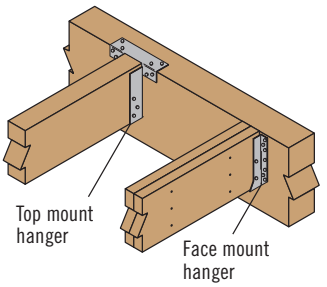
L1

Bearing for Door or Window Header



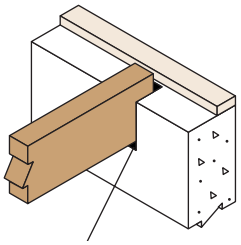
L2

Beam to Beam Connection



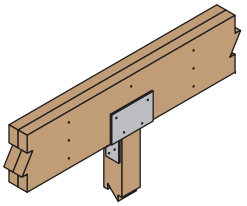
L3

Bearing at Concrete Wall



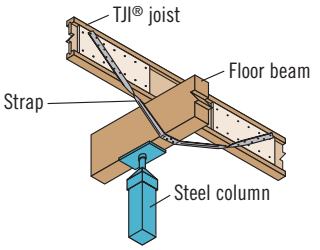
L4

Bearing at Column



L5 *Verify beam bearing length on page 14 and column factored resistance on page 19*

Beam to Column Lateral Brace

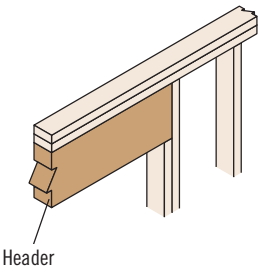


L14 *Suggested lateral bracing detail for beams when required. Verify beam bearing length on page 14.*

WINDOW AND DOOR HEADER DETAILS

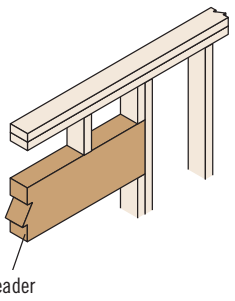
2x4 Wall Framing

Full Depth Header



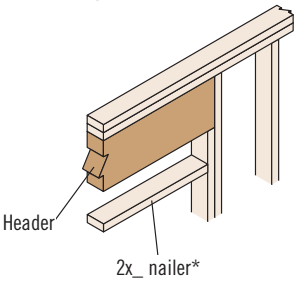
L7

Low Header



L8

High Header

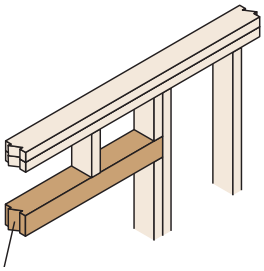


L9 **Double nailer may be required depending upon the opening size and window type*

2x6 Wall Framing

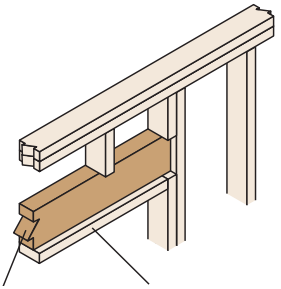
Headers not matching wall thickness may be installed flush to the inside or outside of the wall depending upon sheathing and trim attachment requirements

Plank Orientation Header



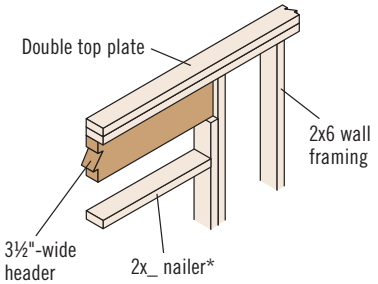
L10

Low Header



L11

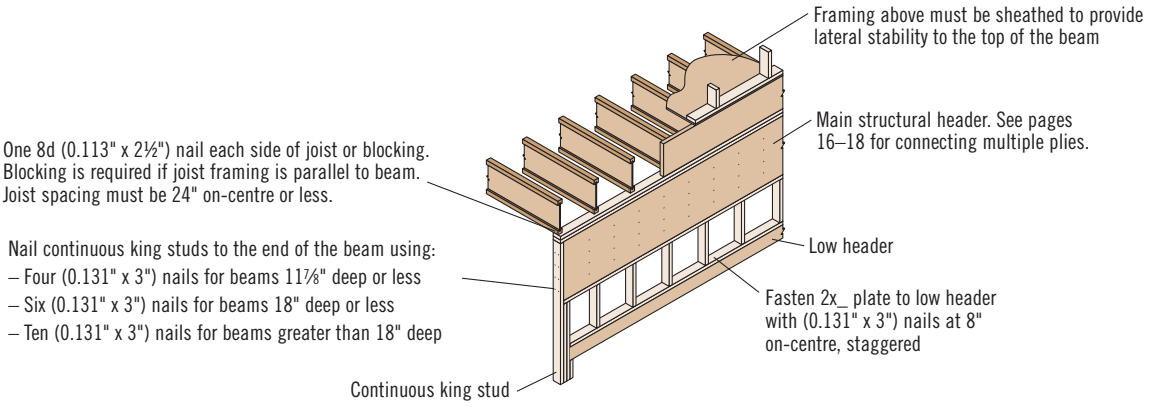
High Header



L12 **Double nailer may be required depending upon the opening size and window type*

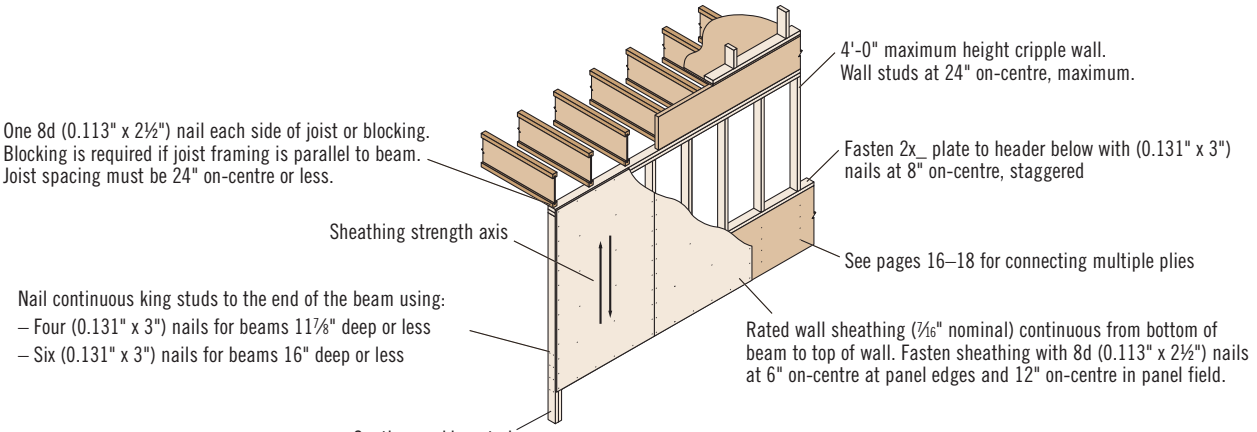
WINDOW AND DOOR HEADER DETAILS

Dropped Header with Full Lateral Bracing



L15

Dropped Header with Acceptable Lateral Bracing



L16

When framed as shown above, the following dropped headers are considered fully braced under uniform-load, simple-span conditions:

Single-ply:
– 1¾" wide headers, 11⅞" deep or less
– 3½" wide headers, 16" deep or less, with a maximum span of 18'-6"

Multiple-ply:
– Headers up to four 1¾" plies, 11⅞" deep or less
– Headers up to four 1¾" x 14" plies, with a maximum span of 8'-6"

NAILING ON NARROW FACE

Nails Installed on the Narrow Face

Nail Size	Closest On-Centre Spacing Per Row		
	TimberStrand® LSL	Microllam® LVL	Parallam® PSL
8d (0.131" x 2½"), 8d (0.113 x 2½") or 10d (0.128" x 3")	3"	4"	4"
10d (0.148" x 3") or 12d (0.148" x 3¼")	3"	5"	4"
16d (0.162" x 3½")	6"(1)	8"(2)	6"
Pneumatic (0.131" x 3"-3½")	3"	4"	4"

(1) Can be reduced to 3½" on-centre if nail penetration into the narrow edge is no more than 1¼" (to minimize splitting).

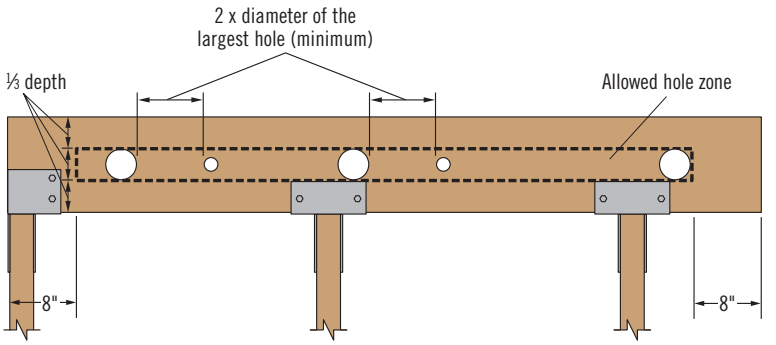
(2) Can be reduced to 5" on-centre if nail penetration into the narrow edge is no more than 1¼" (to minimize splitting).

- To minimize splitting, member edge distance and spacing between rows shall be 2.5 x nail diameter or ⅜", whichever is greater. Where multiple rows are used, fasteners in adjacent rows must be staggered and the rows must be equally spaced from the centreline of the narrow face axis.

Fastener spacing not applicable to shear wall applications. See CCMC 12627-R for grade specific TimberStrand® LSL nailing requirements.

ALLOWABLE HOLES

1.55E TimberStrand® LSL Headers and Beams



General Notes

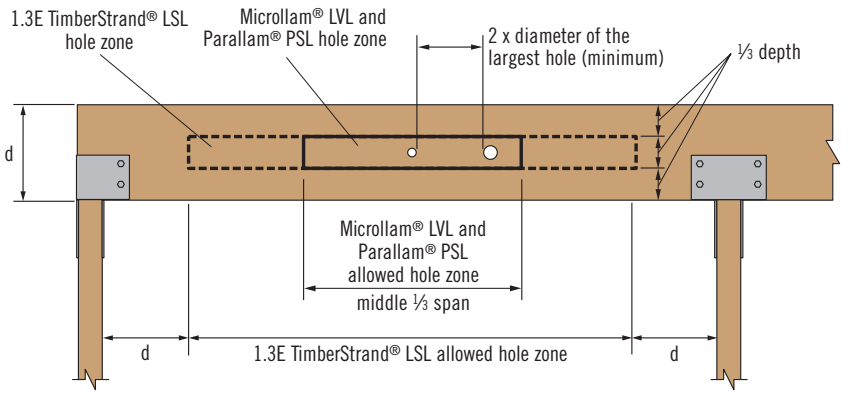
- Allowed hole zone suitable for headers and beams with **uniform and/or concentrated loads** anywhere along member.
- Round holes only.
- No holes in headers or beams in plank orientation.

1.55E TimberStrand® LSL

Header or Beam Depth	Maximum Round Hole Size
9½"	3"
11⅞"	3⅝"
14"–16"	4⅝"

- See illustration for allowed hole zone.

Other Trus Joist® Headers and Beams



Larger holes in Trus Joist® structural composite lumber may be possible; refer to ForteWEB™ or Javelin® software.

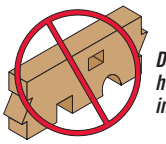
General Notes

- Allowed hole zone suitable for headers and beams with **uniform loads only**.
- Round holes only.
- No holes in cantilevers.
- No holes in headers or beams in plank orientation.

Other Trus Joist® Beams

Header or Beam Depth	Maximum Round Hole Size
5½"	1¾"
7¼"–20"	2"

- See illustration for allowed hole zone.



DO NOT cut, notch, or drill holes in headers or beams except as indicated in the illustrations and tables

BEARING LENGTH REQUIREMENTS

Factored Reaction (lbs)	1.3E TimberStrand® LSL		1.55E TimberStrand® LSL			2.0E Microllam® LVL			2.0E Parallam® PSL		
	Beam Orientation	Plank Orientation	Beam Orientation			Beam Orientation			Beam Orientation		
	Width	Width	Width			Width			Width		
	3½"	5½"	1¾"	3½"	5¼"	1¾"	3½"	5¼"	3½"	5¼"	7"
6,000	1¾"	1½"	2¾"	1½"	1½"	3¼"	1¾"	1½"	1¾"	1½"	1½"
8,000	2¼"	1½"	3½"	1¾"	1½"	4¼"	2¼"	1½"	2¼"	1½"	1½"
10,000	3"	2"	4½"	2¼"	1½"	5¼"	2¾"	1¾"	2¾"	1¾"	1½"
12,000	3½"	2¼"	5¼"	2¾"	1¾"	6½"	3¼"	2¼"	3¼"	2¼"	1¾"
14,000	4"	2¾"	6¼"	3¼"	2¼"	7½"	3¾"	2½"	3¾"	2½"	2"
16,000	4½"	3"	7"	3½"	2½"		4¼"	3"	4¼"	3"	2¼"
18,000	5"	3½"	8"	4"	2¾"		4¾"	3¼"	4¾"	3¼"	2½"
20,000	5¾"	3¾"		4½"	3"		5¼"	3½"	5¼"	3½"	2¾"
22,000	6¼"	4¼"		5"	3¼"		6"	4"	6"	4"	3"
24,000	6¾"	4½"		5¼"	3½"		6½"	4¼"	6½"	4¼"	3¼"
26,000	7¼"	5"		5¾"	4"		7"	4¾"	7"	4¾"	3½"
28,000	7¾"	5¼"		6¼"	4¼"		7½"	5"	7½"	5"	3¾"
30,000		5¾"		6¾"	4½"		8"	5¼"	8"	5¼"	4"
32,000		6"		7"	4¾"			5¾"		5¾"	4¼"
34,000		6½"		7½"	5"			6"		6"	4½"

General Notes

- **Minimum bearing length:** 1½" at ends, 3½" at intermediate supports.
- Bearing across full beam width required.
- Interpolation between reaction loads is permitted for determining bearing lengths.
- Bearing lengths based on the following factored bearing resistances:
  - **1.3E TimberStrand® LSL:** 1,035 psi; 970 psi for plank orientation.
  - **1.55E TimberStrand® LSL:** 1,305 psi.
  - **2.0E Microllam® LVL:** 1,090 psi.
  - **2.0E Parallam® PSL:** 1,090 psi.

TAPERED END CUTS

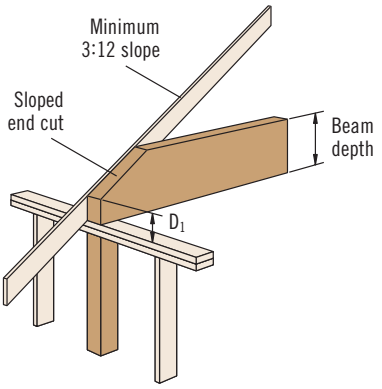
Factored Reactions for 3½"(1) TimberStrand® LSL Headers and Beams (lbs)

Bearing	Beam Depth	Outside Heel Height D_1							
		4½"	5"	5½"	6"	6½"	7"	7½"	8"
3½" Wood Plate(2)	7¼"	7,535	7,535	7,535	7,535				
	9½"–11⅞"	7,535	7,535	7,535	7,535	7,535	7,535	7,535	7,535
	14"		7,535	7,535	7,535	7,535	7,535	7,535	7,535
	16"				7,535	7,535	7,535	7,535	7,535
5¼" Wood Plate(2)	7¼"	11,300	11,300	11,300					
	9½"–14"	8,775	9,530	10,285	11,035	11,300	11,300	11,300	11,300
	16"			10,285	11,035	11,300	11,300	11,300	11,300
3½" Column(3)	7¼"	11,005	11,875	11,875	11,875				
	9½"	8,115	8,870	9,620	10,375	11,130	11,470	11,470	11,470
	11⅞"	8,115	8,870	9,620	10,375	11,130	11,885	12,640	13,395
	14"		8,870	9,620	10,375	11,130	11,885	12,640	13,395
	16"				10,375	11,130	11,885	12,640	13,395

(1) For 1¾" and 5¼" beams, multiply by 0.5 and 1.5, respectively.

(2) Bearing lengths are based on factored bearing resistance of 615 psi.

(3) Bearing lengths are based on factored bearing resistance of 1,035 psi for 1.3E TimberStrand® LSL, and 1,305 psi for 1.55E TimberStrand® LSL.



Tapered end cut detailed above is not allowed with TJI® joists

Factored Reactions for 3½"(1) Microllam® LVL and Parallam® PSL Beams (lbs)

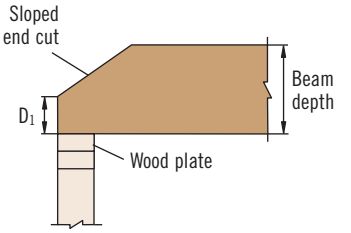
Bearing	Beam Depth	Outside Heel Height D_1								
		4½"	5"	5½"	6"	6½"	7"	7½"	8"	10"
3½" Wood Plate(2)	9¼"	7,480	7,535	7,535	7,535	7,535	7,535	7,535	7,535	
	9½"	7,480	7,535	7,535	7,535	7,535	7,535	7,535	7,535	
	11¼"	7,480	7,535	7,535	7,535	7,535	7,535	7,535	7,535	7,535
	11⅞"	7,480	7,535	7,535	7,535	7,535	7,535	7,535	7,535	7,535
	14"		7,535	7,535	7,535	7,535	7,535	7,535	7,535	7,535
	16"				7,535	7,535	7,535	7,535	7,535	7,535
	18"					7,535	7,535	7,535	7,535	7,535
	20"							7,535	7,535	7,535
5¼" Wood Plate(2)	9¼"	8,085	8,780	9,480	10,175	10,295	10,295	10,295		
	9½"	8,085	8,780	9,480	10,175	10,575	10,575	10,575	10,575	
	11¼"	8,085	8,780	9,480	10,175	10,870	11,305	11,305	11,305	
	11⅞"	8,085	8,780	9,480	10,175	10,870	11,305	11,305	11,305	11,305
	14"	8,085	8,780	9,480	10,175	10,870	11,305	11,305	11,305	11,305
	16"			9,480	10,175	10,870	11,305	11,305	11,305	11,305
	18"				10,175	10,870	11,305	11,305	11,305	11,305
	20"						11,305	11,305	11,305	11,305
3½" Column(3)	9¼"	7,480	8,175	8,870	9,565	10,260	10,295	10,295	10,295	
	9½"	7,480	8,175	8,870	9,565	10,260	10,575	10,575	10,575	
	11¼"	7,480	8,175	8,870	9,565	10,260	10,955	11,650	12,345	12,520
	11⅞"	7,480	8,175	8,870	9,565	10,260	10,955	11,650	12,345	13,215
	14"		8,175	8,870	9,565	10,260	10,955	11,650	12,345	13,375
	16"				9,565	10,260	10,955	11,650	12,345	13,375
	18"					10,260	10,955	11,650	12,345	13,375
	20"							11,650	12,345	13,375

(1) For 1¾", 5¼", and 7" beams, multiply by 0.5, 1.5, and 2.0, respectively.

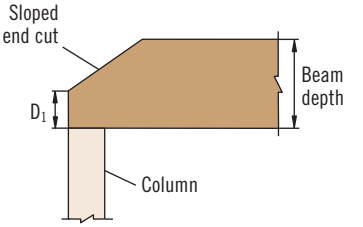
(2) Bearing lengths based on a factored bearing resistance of 620 psi.

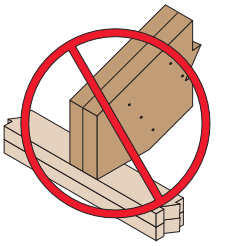
(3) Bearing lengths based on factored bearing resistance of 1,090 psi for Microllam® LVL and Parallam® PSL.

Wood Plate Connection



Column Connection





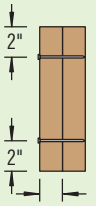
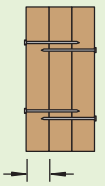
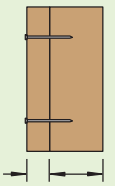
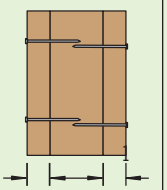
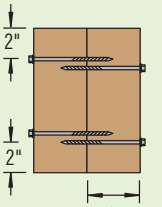
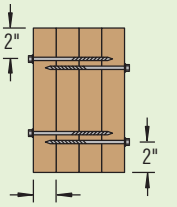
DO NOT overhang seat cuts on beams beyond inside face of support member

General Notes

- No increase for duration of load is permitted above standard term.
- No holes or concentrated load within tapered cut.
- Table considers only downward loading. Contact your Weyerhaeuser representative for assistance with uplift loading or other conditions.

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

L17 Factored Uniform Load—Maximum Factored Uniform Load Applied to Either Outside Member (PLF)

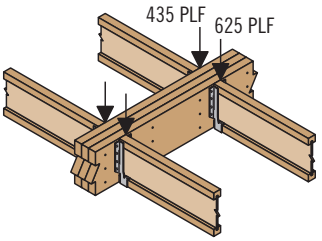
Fastener Type	Location	Number of Rows	Fastener On-Centre Spacing	Fastener Pattern					
				Assembly A	Assembly B	Assembly C	Assembly D	Assembly E	Assembly F
									
				3½" wide, 2-ply	5¼" wide, 3-ply	5¼" wide, 2-ply	7" wide, 3-ply	7" wide, 2-ply	7" wide, 4-ply
10d (0.128" x 3") or (0.131" x 3") Nail[1]	As shown	2[5]	12"	575	430	430	385		
		3	12"	865	650	650	575		
½" A307 Through Bolt[2][3]	–	2	24"	780	585	880	780	1,560	520
			19.2"	975	730	1,095	975	1,950	650
			16"	1,170	880	1,315	1,170	2,340	780
Screw Length ▶				3½"	3½"	3½"	3½"	6"	6"
SDS[3]	As shown	2	24"	870	655	655	580	2,040	680
			19.2"	1,090	815	815	725	2,550	850
			16"	1,305	980	980	870	3,060	1,020
WS[3]	As shown	2	24"	905	680	680	605		765[6]
			19.2"	1,130	850	850	755		960[6]
			16"	1,355	1,015	1,015	905		1,150[6]
Screw Length ▶				3⅜"	5"	3⅜"	6¾"	6¾"	6¾"
SDW22[3][4]	One side only	2	24"	680	625	585	555	1,140	555
			19.2"	850	780	730	690	1,425	690
			16"	1,020	935	880	830	1,710	830

(1) Nailed connection values may be doubled for 6" on-centre or tripled for 4" on-centre nail spacing.
(2) Washers required. Bolt holes to be 9⁄16" maximum.
(3) Factored resistance for 24" on-centre bolted or screwed connection values may be doubled for 12" on-centre spacing.
(4) When loading the head side of a SDW22 screw, assemblies A, B, D, and F can be increased by 15%.
(5) For beams up to 14" deep, maximum.
(6) Assembly F is not recommended for TimberStrand® LSL or Parallam® PSL.

General Notes for Side-Loaded Beam Tables

- Connections are based on Limit States Design per CSA O86.
- Use specific gravity of 0.5 when designing lateral connections.
- Values listed are for standard term loading.
- When fasteners are required on both sides, stagger fasteners on the second side so they fall halfway between fasteners on the first side.
- Verify adequacy of beam in allowable load tables on pages 6–11.
- 7" wide beams should be side-loaded only when loads are applied to both sides of the members (to minimize rotation).
- Minimum end distance for bolts and screws is 6".
- Beams wider than 7" require special consideration by the design professional of record.

Uniform Load Design Example



First, check load tables on pages 6–11 to verify that three pieces can carry the total factored load of 1,060 plf with proper live load deflection criteria. Total factored load = (1.25 x dead load) + (1.5 x live load). Maximum factored load applied to either outside member is 625 plf. For an assembly of three 1¾" plies (Assembly B), two rows of (0.131" x 3") nails at 12" on-centre is good for only 430 plf. Therefore, use three rows of (0.131" x 3") nails at 12" on-centre (good for 650 plf).

Alternatives: Two rows of ½" bolts or 5" SDW22 screws at 19.2" on-centre.

MULTIPLE-MEMBER CONNECTIONS FOR SIDE-LOADED BEAMS

L18 Factored Point Load—Maximum Factored Point Load Applied to Either Outside Member (lbs)

Fastener Type	Location	Number of Fasteners per Side	Fastener Pattern: Assembly A 3½" wide, 2-ply	Assembly B 5¼" wide, 3-ply	Assembly C 5¼" wide, 2-ply	Assembly D 7" wide, 3-ply	Assembly E 7" wide, 2-ply	Assembly F 7" wide, 4-ply
10d (0.128" x 3") or (0.131" x 3") Nail	As shown	6	1,730	1,295	1,295			
		12	3,455	2,590	2,590	2,305		
		18	5,185	3,890	3,890	3,455		
		24	6,910	5,185	5,185	4,610		
½" A307 Through Bolt(1)	–	4	3,120	2,340	3,510	3,120	6,240	2,080
		6	4,680	3,510	5,265	4,680	9,360	3,120
		8	6,240	4,680	7,020	6,240	12,480	4,160
Screw Length ▶			3½"	3½"	3½"	3½"	6"	6"
SDS	As shown	4	3,480	2,610	2,610	2,320	8,160	2,720
		6	5,220	3,915	3,915	3,480	12,240	4,080
		8	6,960	5,220	5,220	4,640	16,320	5,440
WS	As shown	4	3,615	2,710	2,710	2,410		3,065(3)
		6	5,425	4,070	4,070	3,615		4,600(3)
		8	7,230	5,425	5,425	4,820		6,135(3)
Screw Length ▶			3⅜"	5"	3⅜"	6¾"	6¾"	6¾"
SDW22(2)	One side only	4	2,720	2,490	2,340	2,215	4,560	2,215
		6	4,080	3,735	3,510	3,320	6,840	3,320
		8	5,440	4,980	4,680	4,425	9,120	4,425

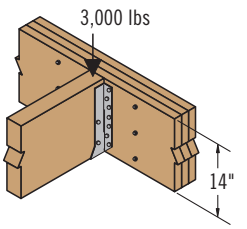
(1) Washers required. Bolt holes to be 9⁄16" maximum.

(2) When loading the head side of a SDW22 screw, assemblies A, B, D, and F can be increased by 15%.

(3) Assembly F is not recommended for TimberStrand® LSL or Parallam® PSL.

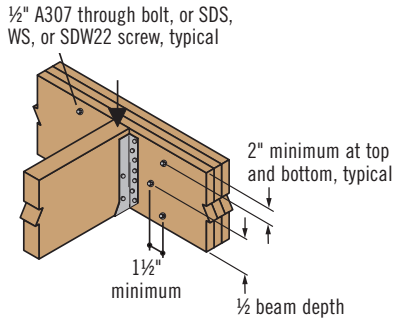
Point Load Design Example

First, verify that a 3-ply, 1¾" x 14" beam can support the factored 3,000 lb point load and all other loads applied. The factored 3,000 lb point load is being transferred to the beam with a face mount hanger. For an assembly of three 1¾" plies (Assembly B), six 5"-long SDW22 screws are good for 3,735 lbs with a face mount hanger.



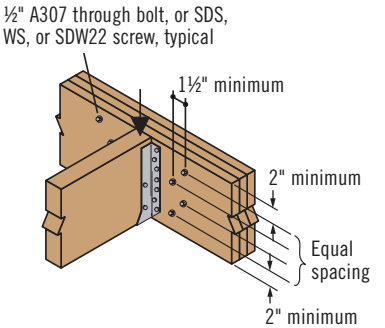
Point Load Connector Spacing

4- or 6-Bolt or Screw Connection



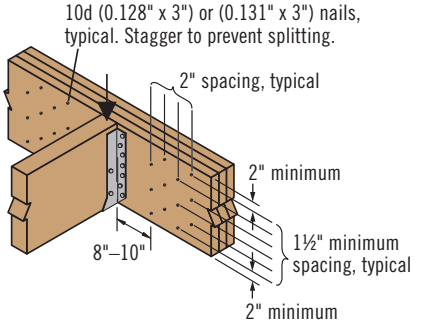
L19 *Minimum beam depth is 9½" for ½" diameter bolts*

8-Bolt or Screw Connection



L20 *Minimum beam depth is 11⅞" for ½" diameter bolts*

Nail Connection



L21 *There must be an equal number of nails on each side of the connection*

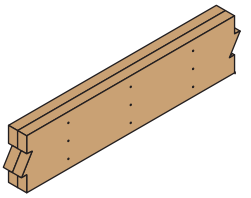
MULTIPLE-MEMBER CONNECTIONS FOR TOP-LOADED BEAMS

Fastener Installation Requirements

Piece Width	Number of Plies	Fastener				
		Type[1]	Min. Length	# Rows	O.C. Spacing	Location
1¾"	2	10d nails	3"	3[2]	12"	One side
		12d–16d nails	3¼"	2[2]		
		Screws	3⅜" or 3½"	2	24"	
	3	10d nails	3"	3[2]	12"	Both sides
		12d–16d nails	3¼"	2[2]		
		Screws	3⅜" or 3½"	2	24"	Both sides
			5"			One side
	4	10d nails[3]	3"	3[2]	12"	One side (per ply)
		12d–16d nails[3]	3¼"	2[2]		
		Screws	5" or 6"	2	24"	Both sides
			6¾"			One side
3½"	2	Screws	5" or 6"	2	24"	Both sides
			6¾"			One side
		½" bolts	8"			–

(1) 10d nails are 0.128"–0.131" diameter; 12d–16d nails are 0.148"–0.162" diameter; screws are SDS, WS, or SDW22.
(2) An additional row of nails is required with depths of 14" or greater.
(3) When connecting 4-ply members, nail each ply to the other and offset nail rows by 2" from rows in the ply below.

When fasteners are required on both sides, stagger fasteners on the second side so they fall halfway between fasteners on the first side.



Load must be applied evenly across entire beam width. Otherwise, use connections for side-loaded beams

L6 ***Multiple pieces can be nailed or bolted together to form a header or beam of the required size, up to a maximum width of 7"***

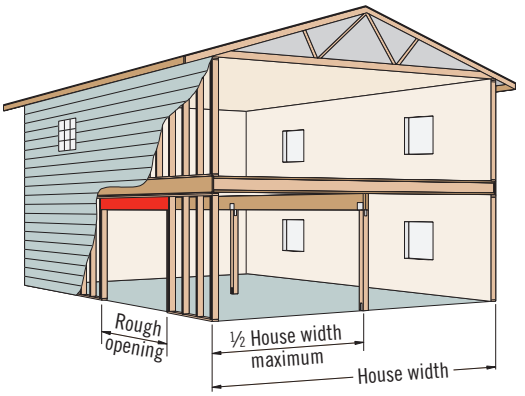
Metric to Imperial Conversions

Metric Unit	Imperial Conversion
1 kN	0.2248 kip
1 N	0.2248 lb
1 m	3.281 ft
1 mm	0.0394 in.
1 kg	2.205 lb mass
1 N • m	0.7376 lb • ft
1 N • m	8.851 lb • in.
1 mm⁴	2.402 x 10^{-6} in.⁴
1 Pa	0.0209 lb/ft²
1 kPa	0.1450 lb/in.²

Imperial to Metric Conversions

Imperial Unit	Metric Conversion
1 kip	4.448 kN
1 lb	4.448 N
1 ft	0.3048 m
1 in.	25.40 mm
1 lb mass	0.4536 kg
1 lb • ft	1.356 N • m
1 lb • in.	0.1130 N • m
1 in.⁴	0.4162 x 10^{6} mm⁴
1 lb/ft²	47.88 Pa
1 lb/in.²	6.895 kPa

EXAMPLE HEADER DESIGN PROBLEM



Determine the size of 1.55E TimberStrand® LSL header required for a 10' rough opening for the given loads and assumptions:

- House width = 36'
- Trussed roof with 24" roof truss overhangs
- Roof Load = 30 psf snow + 15 psf dead
- Floor Load = 40 psf live + 12 psf dead

Calculated unfactored plf loads acting on the beam (20' roof and 9' floor tributary):

- Snow = 600 plf
- Floor = 360 plf
- Dead = 490 plf (includes wall load at 80 plf)

Next, calculate design loads per 2010 NBCC load combinations (primary load and companion load action).

1. **Unfactored live load:**
   Case 2: 1.0 x 360 + 0.5 x 600 = 660 plf
   Case 3: 1.0 x 600 + 0.5 x 360 = 780 plf
   Therefore use Case 3 at 780 plf
2. **Unfactored total load:**
   For Cases 2 and 3:
   Unfactored dead load = 1.0 x 490 = 490 plf
   Unfactored total load = 780 plf + 490 plf = 1,270 plf
3. **Factored total load:**
   Case 2: 1.5 x 360 + 0.5 x 600 = 840 plf
   Case 3: 1.5 x 600 + 0.5 x 360 = 1,080 plf
   Therefore use Case 3 at 1,080 plf
   Factored dead load = 1.25 x 490 = 613 plf
   Factored total load = 1,080 + 613 = 1,693 plf

Try using a 3½" x 11⅞" 1.55E TimberStrand® LSL header. See page 7 of this guide.

Span	Condition	1.55E Grade							
		1¾" Width			3½" Width				5
		9½"	11⅞"	14"	9½"	11⅞"	14"	16"	9½"
10'	Unfactored Resistance (LL)	261	487	760	523	974	1,520	2,154	785
	Unfactored Resistance (TL)	387	724	*	775	1,449	*	*	1,16
	Total Factored Resistance	686	1,052	1,442	1,373	2,105	2,885	3,725	2,05
	Min. End/Int. Bearing (in.)	1.5/3.8	2.3/5.8	3.2/9.7	1.5/3.8	2.3/5.8	3.2/7.9	4.1/10.2	1.5/3.8
	Résistance non pondérée (S)	155	293	464	311	587	928	1,334	
		228			456	868			

Summary:

1. **Unfactored Resistance (LL)** = 974 > 780 OK
2. **Unfactored Resistance (TL)** = 1,449 > 1,270 OK
3. **Total Factored Resistance** = 2,105 > 1,693 OK

Therefore a 3½" x 11⅞" 1.55E TimberStrand® LSL header is acceptable. The beam requires 2.6" of bearing at end supports and 6.5" of bearing at intermediate support.

Axial Factored Resistances (lbs) for 1.3E TimberStrand® LSL

Column Bearing Type	Effective Column Length	Column Size			
		3½" x 3½"	3½" x 4⅜"	3½" x 5½"	3½" x 7¼"
On Column Base	3'	18,970	23,570	29,425	38,455
	4'	17,740	22,055	27,550	36,025
	5'	16,015	19,920	24,900	32,595
	6'	13,960	17,380	21,745	28,495
	7'	11,715	14,645	18,410	24,205
	8'	9,595	11,995	15,080	19,875
	9'	7,845	9,805	12,325	16,250
	10'	6,420	8,025	10,090	13,300
	12'	4,340	5,430	6,825	8,995
	14'	2,990	3,740	4,700	6,180
Wood Plate Bearing(1)(2)	3'–8'	8,340	10,225	12,645	15,605
	9'	7,845	9,805	12,325	15,605
	10'	6,420	8,025	10,090	13,300
	12'	4,340	5,430	6,825	8,995
	14'	2,990	3,740	4,700	6,180

(1) Wood plate bearing is based on the compression perpendicular-to-grain strength of SPF with K_B applied in accordance with CSA 086.

(2) See **Top or Bottom Plate Connection** detail at right.

Axial Factored Resistances (lbs) for 1.8E Parallam® PSL

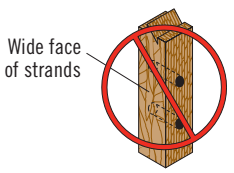
Column Bearing Type	Effective Column Length	Column Size					
		3½" x 3½"	3½" x 5¼"	3½" x 7"	5¼" x 5¼"	5¼" x 7"	7" x 7"
On Column Base	6'	19,365	29,020	38,435	54,735	72,980	100,000
	7'	16,245	24,365	32,490	51,350	68,470	100,000
	8'	13,305	19,955	26,610	47,425	63,230	96,390
	9'	10,875	16,315	21,750	43,155	57,540	92,070
	10'	8,900	13,350	17,800	38,740	51,655	87,170
	12'	6,015	9,025	12,030	29,760	39,680	76,175
	14'	4,145	6,215	8,275	22,775	30,370	64,230
	16'	Slenderness ratio exceeds 50			17,480	23,310	52,685
	18'				13,500	17,995	43,130
	20'				10,510	14,010	35,345
	22'						29,040
	24'						23,945

General Notes

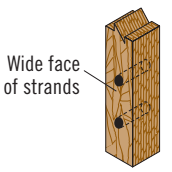
- Tables are based on:
  - Solid, one-piece column members used in dry-service conditions.
  - Bracing in both directions at column ends.
  - CSA 086.
  - Simple columns with axial loads only. For side loads or other combined bending and axial loads, see the CSA 086 provisions.
  - $K_D = 1.0$, where the specified snow or live load is greater than the specified dead load. For other load cases, use Weyerhaeuser software.
- Factored resistances have been adjusted to accommodate the worst case of the following eccentric conditions: ⅙ of column thickness (first dimension) or ⅙ of column width.
- Beams and columns must remain straight to within $5L^2/4608$ (in.) of true alignment. L is the unrestrained length of the member in feet.

For column specified strengths see page 5.

The column values listed are for dry-service conditions ONLY. When wet-service conditions exist, contact your Weyerhaeuser representative for other product solutions.

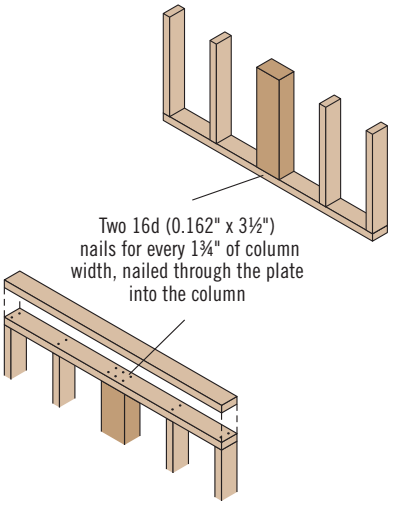


DO NOT install bolts or screws into the narrow face of strands

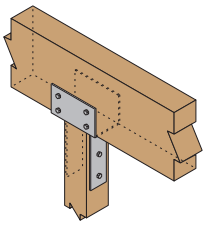


In order to use the manufacturer's published capacities when designing column caps, bases, or holdowns for uplift, the bolts or screws must be installed perpendicular to the wide face of strands, as shown above.

Top or Bottom Plate Connection

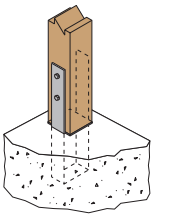


Beam on Column Cap



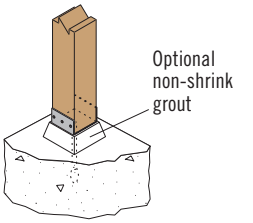
P1

Column Base



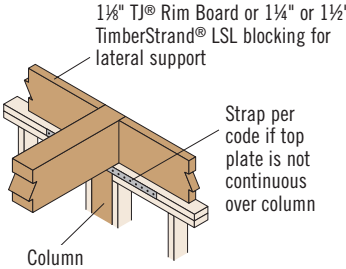
P2

Elevated Column Base



P3

Beam on Column



L1

WE CAN HELP YOU BUILD SMARTER

You want to build solid and durable structures—we want to help. Weyerhaeuser provides high-quality building products and unparalleled technical and field assistance to support you and your project from start to finish.

Floors and Roofs: Start with the best framing components in the industry: our Trus Joist® TJI® joists; TimberStrand® LSL rim board; and TimberStrand® LSL, Microllam® LVL, and Parallam® PSL headers and beams. Pull them all together with our self-gapping and self-draining Weyerhaeuser Edge Gold™ floor panels and durable Weyerhaeuser roof sheathing.

Walls: Get the best value out of your framing package—use TimberStrand® LSL studs for tall walls, kitchens, and bathrooms, and our traditional, solid-sawn lumber everywhere else. Cut down installation time by using TimberStrand® LSL headers for doors and windows, and Weyerhaeuser wall sheathing with its handy two-way nail lines.

Software Solutions: Whether you are a design professional or lumber dealer, Weyerhaeuser offers an array of software packages to help you specify individual framing members, create cut lists, manage inventories—even help you design a complete structural frame. Contact your Weyerhaeuser representative to find out how to get the software you need.

Technical Support: Need technical help? Weyerhaeuser has one of the largest networks of engineers and sales representatives in the business. Call us for help, and a skilled member from our team of experts will answer your questions and work with you to develop solutions that meet all your structural framing needs.


LIMITED LIFETIME
PRODUCT WARRANTY

Weyerhaeuser provides a limited warranty for the expected life of the structure for all Trus Joist® branded products. Product information, installation instructions, and the full text of each product's limited warranty (including limitations and exclusions) are available on the Weyerhaeuser website, from your Weyerhaeuser representative, or by calling toll free: 888-453-8358.

Additionally, Weyerhaeuser offers limited warranties on a broad variety of its other products. To see complete details of all Weyerhaeuser product warranties, visit weyerhaeuser.com/wood products/warranty.

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