

## Allowable Axial Loads (lb) for 2.0E or 2.2E Parallam® PSL Beams Used as Columns

Column Bearing Type	Effective Column Length	Column Size											
		3½" x 9¼"			3½" x 9½"			3½" x 11¼"			3½" x 11⅞"		
		100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%
On Column Base	8'	20,700	21,550	22,040	21,260	22,130	22,635	25,175	26,210	26,805	26,575	27,665	28,290
	9'	17,350	17,980	18,340	17,820	18,465	18,835	21,100	21,865	22,305	22,275	23,080	23,545
	10'	14,715	15,190	15,470	15,110	15,605	15,885	17,895	18,475	18,810	18,890	19,505	19,855
	11'	12,610	12,985	13,200	12,950	13,335	13,560	15,335	15,795	16,055	16,190	16,670	16,950
	12'	10,915	11,215	11,385	11,210	11,520	11,695	13,275	13,640	13,850	14,010	14,395	14,620
On DF or SP Wood Plate	8'	18,290 <sup>[1]</sup>			18,785 <sup>[1]</sup>			22,245 <sup>[1]</sup>			23,485 <sup>[1]</sup>		
	9'	17,350	17,980	18,290 <sup>[1]</sup>	17,820	18,465	18,785 <sup>[1]</sup>	21,100	21,865	22,245 <sup>[1]</sup>	22,275	23,080	23,485 <sup>[1]</sup>
	10'	14,715	15,190	15,470	15,110	15,605	15,885	17,895	18,475	18,810	18,890	19,505	19,855
	11'	12,610	12,985	13,200	12,950	13,335	13,560	15,335	15,795	16,055	16,190	16,670	16,950
	12'	10,915	11,215	11,385	11,210	11,520	11,695	13,275	13,640	13,850	14,010	14,395	14,620
Column Bearing Type	Effective Column Length	Column Size											
		5¼" x 9¼"			5¼" x 9½"			5¼" x 11¼"			5¼" x 11⅞"		
		100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%
On Column Base	8'	50,795	54,325	56,380	52,165	55,795	57,905	61,775	66,075	68,570	65,210	69,745	72,380
	9'	44,475	47,115	48,650	45,675	48,390	49,965	54,090	57,305	59,165	57,095	60,485	62,455
	10'	38,945	40,980	42,160	40,000	42,090	43,300	47,365	49,840	51,275	50,000	52,610	54,125
	11'	34,225	35,830	36,760	35,150	36,800	37,755	41,625	43,580	44,710	43,935	46,000	47,195
	12'	30,220	31,515	32,265	31,035	32,365	33,135	36,750	38,325	39,240	38,795	40,455	41,420
On DF or SP Wood Plate	8'	27,440 <sup>[1]</sup>			28,180 <sup>[1]</sup>			33,370 <sup>[1]</sup>			35,225 <sup>[1]</sup>		
	9'												
	10'												
	11'												
	12'												

[1] Allowable axial load is controlled by wood plate bearing capacity.

### General Notes

- Table is based on:
  - Solid, one-piece column members used in dry-service conditions.
  - Bracing in both directions at column ends.
  - National Design Specification (NDS) for Wood Construction (NDS®).
  - Simple columns with axial loads only. For side loads or other combined bending and axial loads, see NDS®.
- Refer to [TJ-9000](#) or [TJ-9020](#) for additional design and installation guidance.
- Columns must remain straight to within  $\frac{5L^2}{4608}$  [in.] of true alignment where  $L$  is column length [ft].
- Allowable loads have been adjusted to accommodate the worst case of the following eccentric load conditions:
  - $e_1 = \frac{1}{6}$  of column depth (second dimension).
  - $e_2 = \frac{1}{6}$  of column thickness (first dimension) +  $\frac{5L^2}{4608}$  where  $L$  is column length [ft].
- Allowable load for "On Column Base" is based on the strength of the column material; design of supporting structure (e.g. foundation) has not been performed.
- Allowable loads for "On DF or SP Wood Plate" are based on Southern Pine reference compression design value perpendicular to grain ( $F_{c\perp} = 565$  psi).

**If you have any questions, please contact your Weyerhaeuser representative.**