

## COLUMN CAPACITY COMPARISON CHART

### Column Axial Factored Resistances (lbs)

Column Material	Column Size	Effective Column Length								
		8' -0"		9' -0"		10' -0"		12' -0"		
		Not Braced	Braced by Wall Sheathing <sup>(1)</sup>	Not Braced	Braced by Wall Sheathing <sup>(1)</sup>	Not Braced	Braced by Wall Sheathing <sup>(1)</sup>	Not Braced	Braced by Wall Sheathing <sup>(1)</sup>	
#1/#2 SPF	2x4	2-ply	2,980	5,615	2,370	4,735	1,890	3,970	1,230	2,780
		3-ply	7,560	8,420	6,650	7,100	5,800	5,955	4,175	4,175
		4-ply	11,230	11,230	9,470	9,470	7,940	7,940	5,565	5,565
	2x6	2-ply	4,565	12,065	3,650	11,185	2,925	10,300	1,910	8,580
		3-ply	11,390	18,100	10,060	16,765	8,815	15,440	6,645	12,865
		4-ply	18,055	24,130	16,795	22,370	15,520	20,595	13,005	17,155
1.3E TimberStrand® LSL	3 1/2" x 3 1/2"	7,460	7,460	6,355	6,355	5,380	5,380	3,820	3,820	
	3 1/2" x 5 1/2"	11,730	17,045	9,990	15,880	8,455	14,665	6,000	12,250	
1.8E Parallam® PSL	3 1/2" x 3 1/2"	11,230	11,230	9,450	9,450	7,910	7,910	5,520	5,520	
	3 1/2" x 5 1/4"	16,840	24,790	14,175	22,710	11,870	20,620	8,290	16,660	
	5 1/4" x 5 1/4"	37,150	37,150	34,005	34,005	30,870	30,870	24,965	24,965	

### General Notes

- Table is based on
    - Column members used in dry-service conditions only.
    - Bracing in both directions at column ends.
    - Standard term.
  - All factored resistances have been adjusted to accommodate the worst case of both 1/6 the column thickness and width eccentricity. See Figure 1.
  - Factored resistances are applicable to simple axially loaded columns using the design provisions of CSA Standard O86-01 Engineering Design in Wood.
  - 1.3E TimberStrand® LSL and 1.8E Parallam® PSL columns are solid, one-piece members only.
  - SPF columns are built-up columns only. Attachment of plies per CWC Wood Design Manual diagrams.
- (1) Columns required to be braced by wall sheathing in the weak (narrow) or built-up axis. Attachment of sheathing to column as per minimum code requirements. See Figure 2.

