

LVL 2950F_b-2.0E Built-Up Column Design Tables

TO USE:

1. Select the applicable column table.
2. Determine the height of the column. If not listed, use the next tallest Height in the table.
3. Select a column size with an axial load resistance greater than the factored design load.

NAILED							
Maximum Factored Axial Load Resistance (lb)							
Column Length	Column Dimensions						
	Double 1-3/4" x 3-1/2"	Double 1-3/4" x 5-1/4"	Double 1-3/4" x 7"	Double 1-3/4" x 9-1/2"	Triple 1-3/4" x 5-1/4"	Triple 1-3/4" x 7"	Triple 1-3/4" x 9-1/2"
6'	11660	17500	23330	31660	35920	47890	65000
7'	9720	14580	19440	26380	32710	43620	59200
8'	8050	12070	16100	21840	29430	39250	53260
9'	6650	9980	13310	18060	26250	34990	47490
10'	5510	8300	11010	14940	23260	31020	42090
12'	3800	5700	7600	10310	18110	24140	32770
14'	2660	3990	5320	7220	14050	18740	25430
16'					10930	14570	19780
18'					8540	11390	15460
20'					6730	8970	12170
22'							
24'							

This table applies to built-up columns that have been fastened together with nails as shown in Fastening Details on page 39.

SCREWED							
Maximum Factored Axial Load Resistance (lb)							
Column Length	Column Dimensions						
	Double 1-3/4" x 3-1/2"	Double 1-3/4" x 5-1/4"	Double 1-3/4" x 7"	Double 1-3/4" x 9-1/2"	Triple 1-3/4" x 5-1/4"	Triple 1-3/4" x 7"	Triple 1-3/4" x 9-1/2"
6'	13160	19460	26320	35570	39410	53330	72040
7'	11030	16310	22060	29810	36060	48780	65900
8'	9180	13560	18350	24790	32600	44080	59560
9'	7610	11240	15230	20560	29190	39480	53350
10'	6310	9300	12630	17050	25980	35140	47470
12'	4370	6430	8740	11790	20340	27530	37190
14'	3070	4500	6130	8270	15830	21460	28970
16'					12330	16740	22590
18'					9640	13110	17680
20'					7590	10330	13930
22'							
24'							

This table applies to built-up columns that have been fastened together with Simpson SDS Screws shown in Fastening Details on page 39.

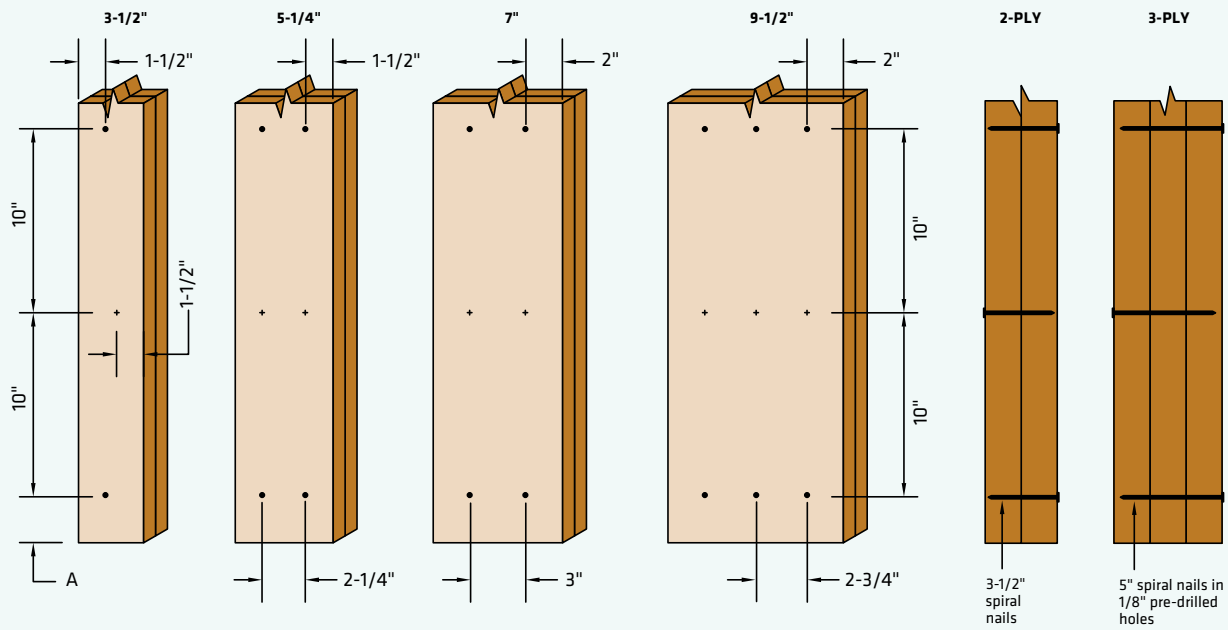
SOLID									
Maximum Factored Axial Load Resistance (lb)									
Column Length	Column Dimensions								
	3-1/2" x 3-1/2"	3-1/2" x 5-1/4"	3-1/2" x 7"	3-1/2" x 9-1/2"	5-1/4" x 5-1/4"	5-1/4" x 7"	5-1/4" x 9-1/2"	7" x 7"	7" x 9-1/2"
6'	16630	24940	33260	45140	49710	66280	89950	97820	132760
7'	14090	21130	28170	38230	45670	60900	82650	93360	126710
8'	11850	17770	23700	32160	41510	55350	75120	88380	119940
9'	9940	14910	19880	26980	37420	49890	67710	83030	112680
10'	8340	12510	16680	22640	33530	44710	60680	77500	105180
12'	5900	8840	11790	16000	26660	35550	48240	66520	90280
14'	4210	6320	8430	11430	21090	28130	38170	56340	76470
16'					16700	22270	30220	47400	64330
18'					13260	17690	24000	39770	53970
20'					10590	14110	19160	33360	45270
22'								28020	38020
24'								23580	32000

This table applies to solid one-piece columns that have been manufactured by LP by glue-laminating.

NOTES:

1. Values have been calculated in accordance with CSA O86-01 and the 2005 National Building Code of Canada (Limit States Design).
2. Values are for standard term loads and dry service conditions.
3. The table has been prepared using the following assumptions:
 - a) The column is braced at the ends only, therefore the column length = the effective length.
 - b) The column is subjected to a simple axial load. The calculated values allow for an eccentricity of 1/6 of the column width or depth, whichever controls. The eccentricity is measured from centerline of column to centerline of axial load.
 - c) The column is not exposed to any lateral loads. For other conditions refer to CSA O86.
4. No splicing is permitted. All plies must extend the full length of the column.

NAILED COLUMN DETAILS



NOTE: A = 2.5" for 2-ply column; 3" for 3-ply column

SCREWED COLUMN DETAILS

