

1½" 1.6E Engineered Framing Lumber (EFL) Assembled Column Capacities (lbs)

Column Length (ft)	(2) 1.5"x3.5"			(2) 1.5"x5.5"			(2) 1.5"x7.25"			(2) 1.5"x9.25"			(2) 1.5"x9.5"		
	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%
8	3020	3085	3120	4740	4850	4905	6250	6390	6470	7975	8120	8140	8190	8305	8330
9	2470	2515	2540	3885	3955	3995	5120	5215	5265	6530	6580	6590	6705	6730	6745
10	2055	2090	2105	3230	3280	3310	4260	4325	4355	5415	5430	5440	5545	5560	5570
11	1735	1760	1770	2725	2760	2780	3595	3635	3640	4545	4555	4560	4655	4665	4670
12	1480	1500	1510	2330	2355	2370	3070	3085	3090	3860	3870	3875	3960	3965	3970
13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
14	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Column Length (ft)	(3) 1.5"x3.5"			(3) 1.5"x5.5"			(3) 1.5"x7.25"			(3) 1.5"x9.25"			(3) 1.5"x9.5"		
	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%
8	6665	6665	6665	10470	10470	10470	13800	13800	13800	17610	17610	17610	18085	18085	18085
9	6475	6595	6655	10465	10465	10465	13795	13795	13795	17600	17600	17600	18075	18075	18075
10	5455	5530	5560	9510	9600	9640	12355	12460	12510	15190	15305	15365	15510	15630	15685
11	4645	4690	4710	8085	8145	8170	10520	10590	10620	13005	13080	13120	13285	13365	13405
12	3995	4025	4040	6950	6990	7005	9055	9100	9120	11220	11270	11295	11475	11525	11555
13	3470	3490	3500	6030	6060	6070	7865	7900	7915	9770	9805	9825	9995	10030	10050
14	3040	3055	3060	5280	5300	5310	6895	6920	6930	8580	8605	8620	8780	8805	8820
16	--	--	--	4145	4155	4160	5420	5430	5440	6760	6775	6785	6920	6940	6945
18	--	--	--	3335	3340	3345	4365	4375	4380	5465	5470	5480	5595	5605	5610

Column Length (ft)	(4) 1.5"x3.5"			(4) 1.5"x5.5"			(4) 1.5"x7.25"			(4) 1.5"x9.25"			(4) 1.5"x9.5"		
	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%	100%	115%	125%
8	8885	8885	8885	13960	13960	13960	18405	18405	18405	23480	23480	23480	24115	24115	24115
10	7565	7650	7690	13945	13945	13945	18380	18380	18380	23455	23455	23455	24085	24085	24085
12	5525	5560	5575	12955	13075	13130	17340	17500	17575	21405	21590	21685	21865	22050	22145
14	4205	4220	4225	10080	10135	10165	13560	13640	13680	16840	16935	16980	17210	17305	17355
16	--	--	--	8050	8080	8095	10870	10910	10935	13555	13610	13640	13865	13920	13950
18	--	--	--	6570	6590	6600	8895	8925	8940	11135	11170	11185	11395	11430	11445
20	--	--	--	5470	5480	5485	7415	7430	7440	9305	9330	9340	9525	9550	9560
22	--	--	--	4620	4630	4635	6270	6285	6290	7890	7905	7915	8080	8095	8100
24	--	--	--	--	--	--	5375	5380	5385	6770	6785	6790	6935	6950	6955

- Table applies to two to four member columns used in dry conditions where in-service moisture content does not exceed 16 percent.
- Loads have been adjusted for worst case eccentric loading of 1/6 of the column thickness or width.
- Load capacities based on 2024 NDS for Wood Construction. Column self weight has been deducted from the axial capacities shown.
- Columns are considered to be unbraced except at column ends. The effective column length in both directions is equal to the actual column length ($K_e = 1.0$ in both directions).
- This chart is not valid for columns exposed to wind load in addition to axial loads shown (i.e. this chart may not be used to size columns in exterior walls).
- Column orientation (thickness & width) may be turned 90 degrees without impacting the axial load capacity in this chart. Maximum eccentricity must be maintained at 1/6 of the column thickness or width.
- No further increases to the axial capacity may be made to the values shown. Load duration increases have already been taken into account for the respective capacities.
- Column length L is defined as the length of the actual wood column itself, and does not include pedestals.
- To size a column for a length not shown, use capacities for the next larger length shown. Do not interpolate.
- Side plates may be required at top end for lateral load considerations (determined by building designer of record) or by local code.
- Total load deflection limited to $L/240$ for 100% LDF and $L/180$ for 115% & 125% LDF.
- See following page for fastening recommendations.
- EFL is composed of LVL (laminated veneer lumber).

1½" 1.6E Engineered Framing Lumber (EFL) Assembled Column Fastening

Multiple-Piece Member Fastening Recommendations (0.128" x 3" nails)

2-Ply All depths

Two rows 9" o.c. staggered. Offset the rows half the required spacing. Nail from one side.
Edge distance for 3½" width = 1". Edge distance for 5½" width = 1½". Edge distance for 7¼" width = 2½".

3-Ply 3½" depth

Two rows 8" o.c. staggered. Offset the rows half the required spacing. Nail from both sides.

5½" & 7¼" depths

Three rows 8" o.c. staggered. Offset the rows half the required spacing. Nail from both sides.

4-Ply 3½" depth

Nail each ply in turn with two rows 9" o.c. staggered. Each additional ply nailing must be offset 3" from the previous ply.

5½" & 7¼" depths

Nail each ply in turn with three rows 9" o.c. staggered. Each additional ply nailing must be offset 3" from the previous ply.

Alternate 4-ply 5½" & 7¼" depths depths fastening: attach together with two rows ½" diameter bolts & washers 8" o.c., 1½" from edges.

General fastening notes (all depths and plies)

1. End distance for nails to be 2". End distance for bolts to be 4".
2. Nail rows for three and four ply members to be 1" from edges of 2x4 & 2x6 depths and 1½" from edges of 2x8.