

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for D.Fir-L (Solid Lumber Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	6,563	6,767	6,887	5,409	5,478	4,408	4,449	3,653	3,681	3,074	3,092
	1-3x4	10,938	11,279	11,479	9,015	9,129	7,346	7,416	6,089	6,134	5,123	5,154
	1-4x4	15,313	16,856	17,136	13,455	13,616	10,954	11,053	9,075	9,139	7,633	7,676
	2-3x4	21,875	22,557	22,957	18,031	18,259	14,692	14,831	12,178	12,269	10,247	10,308
	1-4x6	24,063	26,365	26,832	21,074	21,341	17,171	17,335	14,233	14,339	11,976	12,048
	1-4x8	31,719	34,574	35,228	27,677	28,050	22,573	22,800	18,722	18,869	15,760	15,859
	1-4x10	40,469	43,855	44,745	35,167	35,673	28,711	29,020	23,830	24,029	20,069	20,203
	2-4x6	48,125	52,729	53,663	42,148	42,681	34,343	34,669	28,467	28,678	23,952	24,095
	1-4x12	49,219	53,337	54,419	42,771	43,386	34,919	35,294	28,982	29,224	24,408	24,571
2-4x8	63,438	69,147	70,455	55,355	56,100	45,145	45,601	37,444	37,738	31,519	31,718	
6-Inch Wall	1-2x6	10,313	21,013	22,543	17,969	18,879	15,279	15,831	13,019	13,368	11,160	11,390
	1-3x6	17,188	35,022	37,571	29,948	31,465	25,465	26,386	21,699	22,280	18,601	18,983
	1-4x6	22,688	50,043	53,462	42,562	44,575	36,056	37,274	30,649	31,417	26,230	26,736
	1-6x6	37,813	62,298	69,542	56,150	61,130	49,771	53,048	43,700	45,842	38,252	39,673
	1-6x8	49,844	82,120	91,668	74,016	80,581	65,608	69,928	57,605	60,428	50,423	52,297
	1-6x10	63,594	104,774	116,956	94,434	102,810	83,706	89,218	73,496	77,097	64,332	66,724
	1-6x12	77,344	127,428	142,244	114,852	125,039	101,805	108,508	89,387	93,767	78,242	81,150

Column Perpendicular and Parallel to Grain Capacities for D.Fir-L (Multiple 2x Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	6,563	6,767	6,887	5,409	5,478	4,408	4,449	3,653	3,681	3,074	3,092
	2-2x4	13,125	13,534	13,774	10,819	10,955	8,815	8,899	7,307	7,361	6,148	6,185
	3-2x4	19,688	20,302	20,661	16,228	16,433	13,223	13,348	10,960	11,042	9,222	9,277
	4-2x4	26,250	27,069	27,548	21,637	21,911	17,630	17,798	14,614	14,722	12,296	12,370
	5-2x4	32,813	33,836	34,436	27,046	27,388	22,038	22,247	18,267	18,403	15,370	15,462
	6-2x4	39,375	40,603	41,323	32,456	32,866	26,445	26,697	21,921	22,083	18,444	18,555
	7-2x4	45,938	47,370	48,210	37,865	38,344	30,853	31,146	25,574	25,764	21,518	21,647
	8-2x4	52,500	54,138	55,097	43,274	43,822	35,260	35,596	29,227	29,445	24,592	24,739
	9-2x4	59,063	60,905	61,984	48,684	49,299	39,668	40,045	32,881	33,125	27,666	27,832
6-Inch Wall	1-2x6	10,313	21,013	22,543	17,969	18,879	15,279	15,831	13,019	13,368	11,160	11,390
	2-2x6	20,625	42,027	45,086	35,938	37,758	30,558	31,663	26,039	26,736	22,321	22,780
	3-2x6	30,938	63,040	67,629	53,907	56,637	45,837	47,494	39,058	40,105	33,481	34,170
	4-2x6	41,250	84,054	90,171	71,876	75,516	61,115	63,326	52,077	53,473	44,641	45,560
	5-2x6	51,563	105,067	112,714	89,845	94,395	76,394	79,157	65,097	66,841	55,802	56,950
	6-2x6	61,875	126,080	135,257	107,814	113,274	91,673	94,989	78,116	80,209	66,962	68,340
	7-2x6	72,188	147,094	157,800	125,783	132,153	106,952	110,820	91,135	93,578	78,123	79,730

- See Compression Members: General Notes page 35 for additional information.
- Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for Spruce-Pine-Fir (Solid Lumber Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{cL}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	4,463	5,904	6,013	4,723	4,785	3,851	3,888	3,193	3,217	2,687	2,704
	1-3x4	7,438	9,840	10,021	7,872	7,975	6,418	6,481	5,321	5,362	4,479	4,506
	1-4x4	10,413	13,776	14,029	11,021	11,165	8,985	9,073	7,450	7,507	6,270	6,309
	2-3x4	14,875	19,680	20,042	15,744	15,950	12,835	12,961	10,643	10,725	8,957	9,012
	1-4x6	16,363	21,536	21,959	17,256	17,496	14,080	14,227	11,682	11,777	9,836	9,900
	1-4x8	21,569	28,226	28,818	22,654	22,990	18,504	18,709	15,363	15,496	12,942	13,031
	1-4x10	27,519	35,781	36,586	28,772	29,228	23,530	23,807	19,551	19,729	16,477	16,598
	2-4x6	32,725	43,073	43,917	34,511	34,991	28,161	28,454	23,365	23,554	19,672	19,801
	1-4x12	33,469	43,517	44,496	34,993	35,548	28,617	28,954	23,778	23,995	20,040	20,187
2-4x8	43,138	56,452	57,636	45,308	45,979	37,009	37,418	30,727	30,991	25,883	26,062	
6-Inch Wall	1-2x6	7,013	18,173	19,546	15,592	16,415	13,289	13,789	11,341	11,657	9,732	9,940
	1-3x6	11,688	30,289	32,576	25,987	27,358	22,148	22,982	18,902	19,429	16,220	16,567
	1-4x6	15,428	39,981	43,001	34,303	36,112	29,235	30,337	24,950	25,646	21,410	21,868
	1-6x6	25,713	45,750	51,779	42,017	46,447	37,923	40,995	33,802	35,875	29,927	31,325
	1-6x8	33,894	60,307	68,254	55,386	61,226	49,990	54,039	44,557	47,290	39,449	41,293
	1-6x10	43,244	76,943	87,083	70,664	78,116	63,780	68,947	56,849	60,335	50,331	52,684
	1-6x12	52,594	93,579	105,912	85,943	95,006	77,571	83,854	69,140	73,380	61,214	64,075

Column Perpendicular and Parallel to Grain Capacities for Spruce-Pine-Fir (Multiple 2x Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{cL}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	4,463	5,904	6,013	4,723	4,785	3,851	3,888	3,193	3,217	2,687	2,704
	2-2x4	8,925	11,808	12,025	9,446	9,570	7,701	7,777	6,386	6,435	5,374	5,407
	3-2x4	13,388	17,712	18,038	14,170	14,355	11,552	11,665	9,579	9,652	8,061	8,111
	4-2x4	17,850	23,615	24,050	18,893	19,141	15,402	15,554	12,771	12,869	10,749	10,815
	5-2x4	22,313	29,519	30,063	23,616	23,926	19,253	19,442	15,964	16,087	13,436	13,519
	6-2x4	26,775	35,423	36,075	28,339	28,711	23,103	23,331	19,157	19,304	16,123	16,222
	7-2x4	31,238	41,327	42,088	33,063	33,496	26,954	27,219	22,350	22,522	18,810	18,926
	8-2x4	35,700	47,231	48,100	37,786	38,281	30,804	31,108	25,543	25,739	21,497	21,630
	9-2x4	40,163	53,135	54,113	42,509	43,066	34,655	34,996	28,736	28,956	24,184	24,334
6-Inch Wall	1-2x6	7,013	18,173	19,546	15,592	16,415	13,289	13,789	11,341	11,657	9,732	9,940
	2-2x6	14,025	36,346	39,092	31,184	32,829	26,577	27,579	22,682	23,315	19,464	19,880
	3-2x6	21,038	54,519	58,638	46,776	49,244	39,866	41,368	34,023	34,972	29,196	29,820
	4-2x6	28,050	72,692	78,183	62,368	65,658	53,155	55,158	45,364	46,630	38,927	39,760
	5-2x6	35,063	90,866	97,729	77,960	82,073	66,443	68,947	56,705	58,287	48,659	49,700
	6-2x6	42,075	109,039	117,275	93,553	98,488	79,732	82,737	68,046	69,945	58,391	59,640
	7-2x6	49,088	127,212	136,821	109,145	114,902	93,021	96,526	79,387	81,602	68,123	69,580

1. See Compression Members: General Notes page 35 for additional information.
 2. Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for Hem-Fir (Solid Lumber Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	4,253	5,589	5,667	4,447	4,492	3,613	3,640	2,989	3,007	2,512	2,524
	1-3x4	7,088	9,315	9,445	7,411	7,486	6,021	6,067	4,981	5,012	4,186	4,206
	1-4x4	9,923	14,902	15,143	11,889	12,027	9,676	9,761	8,014	8,069	6,740	6,777
	2-3x4	14,175	18,629	18,890	14,822	14,972	12,042	12,135	9,963	10,023	8,372	8,413
	1-4x6	15,593	23,312	23,714	18,623	18,852	15,168	15,309	12,570	12,661	10,575	10,636
	1-4x8	20,554	30,575	31,137	24,460	24,781	19,941	20,137	16,535	16,662	13,916	14,002
	1-4x10	26,224	38,789	39,554	31,083	31,518	25,366	25,631	21,047	21,219	17,722	17,838
	2-4x6	31,185	46,624	47,427	37,245	37,704	30,336	30,618	25,140	25,322	21,149	21,273
	1-4x12	31,894	47,176	48,106	37,804	38,333	30,850	31,173	25,598	25,806	21,553	21,694
2-4x8	41,108	61,150	62,275	48,921	49,561	39,882	40,274	33,069	33,323	27,832	28,003	
6-Inch Wall	1-2x6	6,683	18,224	19,260	15,286	15,882	12,831	13,189	10,841	11,068	9,241	9,391
	1-3x6	11,138	30,373	32,100	25,476	26,470	21,385	21,982	18,069	18,446	15,402	15,651
	1-4x6	14,702	44,506	47,461	37,765	39,498	31,942	32,989	27,124	27,784	23,197	23,632
	1-6x6	24,503	52,081	57,878	46,660	50,567	41,137	43,673	35,968	37,613	31,388	32,476
	1-6x8	32,299	68,652	76,293	61,506	66,656	54,226	57,569	47,413	49,581	41,375	42,810
	1-6x10	41,209	87,590	97,340	78,473	85,044	69,185	73,450	60,492	63,258	52,788	54,619
	1-6x12	50,119	106,529	118,386	95,440	103,432	84,144	89,331	73,572	76,936	64,202	66,429

Column Perpendicular and Parallel to Grain Capacities for Hem-Fir (Multiple 2x Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	4,253	5,589	5,667	4,447	4,492	3,613	3,640	2,989	3,007	2,512	2,524
	2-2x4	8,505	11,178	11,334	8,893	8,983	7,225	7,281	5,978	6,014	5,023	5,048
	3-2x4	12,758	16,766	17,001	13,340	13,475	10,838	10,921	8,967	9,021	7,535	7,571
	4-2x4	17,010	22,355	22,668	17,786	17,967	14,451	14,562	11,955	12,028	10,046	10,095
	5-2x4	21,263	27,944	28,335	22,233	22,458	18,063	18,202	14,944	15,035	12,558	12,619
	6-2x4	25,515	33,533	34,002	26,680	26,950	21,676	21,843	17,933	18,042	15,069	15,143
	7-2x4	29,768	39,121	39,670	31,126	31,441	25,289	25,483	20,922	21,049	17,581	17,667
	8-2x4	34,020	44,710	45,337	35,573	35,933	28,902	29,124	23,911	24,056	20,092	20,190
	9-2x4	38,273	50,299	51,004	40,019	40,425	32,514	32,764	26,900	27,062	22,604	22,714
6-Inch Wall	1-2x6	6,683	18,224	19,260	15,286	15,882	12,831	13,189	10,841	11,068	9,241	9,391
	2-2x6	13,365	36,448	38,521	30,571	31,764	25,661	26,378	21,683	22,135	18,482	18,781
	3-2x6	20,048	54,672	57,781	45,857	47,646	38,492	39,568	32,524	33,203	27,723	28,172
	4-2x6	26,730	72,896	77,041	61,142	63,528	51,323	52,757	43,365	44,271	36,964	37,562
	5-2x6	33,413	91,120	96,301	76,428	79,410	64,154	65,946	54,206	55,338	46,205	46,953
	6-2x6	40,095	109,344	115,562	91,713	95,292	76,984	79,135	65,048	66,406	55,446	56,343
	7-2x6	46,778	127,568	134,822	106,999	111,174	89,815	92,325	75,889	77,473	64,687	65,734

- See Compression Members: General Notes page 35 for additional information.
- Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for Southern Pine (Solid Lumber Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{cL}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	5,933	6,810	6,921	5,434	5,497	4,422	4,461	3,663	3,688	3,081	3,098
	1-3x4	9,888	11,350	11,535	9,056	9,162	7,371	7,436	6,105	6,147	5,134	5,163
	1-4x4	13,843	16,970	17,226	13,520	13,667	10,994	11,085	9,101	9,160	7,650	7,690
	2-3x4	19,775	22,700	23,069	18,112	18,323	14,741	14,871	12,210	12,294	10,268	10,326
	1-4x6	21,753	26,526	26,958	21,166	21,413	17,227	17,379	14,270	14,368	12,001	12,067
	1-4x8	28,674	34,753	35,369	27,780	28,131	22,635	22,850	18,762	18,901	15,787	15,881
	1-4x10	36,584	44,190	45,008	35,358	35,823	28,827	29,112	23,904	24,089	20,119	20,244
	2-4x6	43,505	53,051	53,917	42,332	42,827	34,455	34,759	28,539	28,736	24,001	24,135
	1-4x12	44,494	53,745	54,739	43,003	43,569	35,060	35,406	29,073	29,297	24,469	24,621
2-4x8	57,348	69,507	70,738	55,559	56,261	45,270	45,700	37,524	37,803	31,573	31,762	
6-Inch Wall	1-2x6	9,323	21,664	23,081	18,361	19,191	15,518	16,019	13,171	13,487	11,260	11,468
	1-3x6	15,538	36,106	38,469	30,602	31,984	25,864	26,698	21,951	22,478	18,766	19,114
	1-4x6	20,510	51,202	54,414	43,254	45,123	36,477	37,603	30,914	31,625	26,404	26,873
	1-6x6	22,688	53,586	60,535	49,088	54,147	44,192	47,672	39,302	41,637	34,735	36,307
	1-6x8	29,906	70,636	79,796	64,707	71,376	58,253	62,840	51,807	54,886	45,787	47,859
	1-6x10	38,156	90,122	101,809	82,557	91,066	74,323	80,176	66,098	70,027	58,418	61,061
	1-6x12	46,406	109,608	123,822	100,408	110,756	90,393	97,511	80,390	85,167	71,049	74,264

Column Perpendicular and Parallel to Grain Capacities for Southern Pine (Multiple 2x Sizes)

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{cL}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-2x4	5,933	6,810	6,921	5,434	5,497	4,422	4,461	3,663	3,688	3,081	3,098
	2-2x4	11,865	13,620	13,842	10,867	10,994	8,845	8,923	7,326	7,377	6,161	6,195
	3-2x4	17,798	20,430	20,762	16,301	16,491	13,267	13,384	10,989	11,065	9,242	9,293
	4-2x4	23,730	27,240	27,683	21,734	21,988	17,690	17,845	14,652	14,753	12,322	12,391
	5-2x4	29,663	34,050	34,604	27,168	27,485	22,112	22,307	18,315	18,442	15,403	15,488
	6-2x4	35,595	40,860	41,525	32,602	32,982	26,534	26,768	21,978	22,130	18,483	18,586
	7-2x4	41,528	47,670	48,445	38,035	38,479	30,957	31,229	25,641	25,818	21,564	21,684
	8-2x4	47,460	54,480	55,366	43,469	43,976	35,379	35,691	29,304	29,506	24,644	24,781
	9-2x4	53,393	61,289	62,287	48,902	49,473	39,802	40,152	32,967	33,195	27,725	27,879
6-Inch Wall	1-2x6	9,323	21,664	23,081	18,361	19,191	15,518	16,019	13,171	13,487	11,260	11,468
	2-2x6	18,645	43,327	46,163	36,722	38,381	31,036	32,038	26,341	26,973	22,520	22,936
	3-2x6	27,968	64,991	69,244	55,083	57,572	46,554	48,057	39,512	40,460	33,779	34,404
	4-2x6	37,290	86,654	92,326	73,444	76,763	62,073	64,076	52,682	53,946	45,039	45,872
	5-2x6	46,613	108,318	115,407	91,805	95,953	77,591	80,095	65,853	67,433	56,299	57,341
	6-2x6	55,935	129,982	138,489	110,166	115,144	93,109	96,114	79,023	80,919	67,559	68,809
	7-2x6	65,258	151,645	161,570	128,527	134,334	108,627	112,132	92,194	94,406	78,819	80,277

1. See Compression Members: General Notes page 35 for additional information.
 2. Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for Parallam (PSL) with Douglas Fir Sill Plate

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-3 1/2x3 1/2	15,313	26,249	26,513	20,779	20,922	16,819	16,904	13,876	13,930	11,636	11,672
	1-3 1/2x5 1/4	22,969	39,373	39,770	31,168	31,383	25,229	25,357	20,815	20,896	17,454	17,508
	1-3 1/2x7	30,625	52,498	53,027	41,558	41,845	33,638	33,809	27,753	27,861	23,272	23,344
6-Inch Wall	1-5 1/4x3 1/2	22,969	78,618	82,323	65,105	66,934	53,972	54,960	45,149	45,729	38,189	38,555
	1-5 1/4x5 1/4	34,453	117,926	123,484	97,657	100,401	80,957	82,439	67,723	68,594	57,284	57,832
	1-5 1/4x7	45,938	157,235	164,646	130,210	133,868	107,943	109,919	90,297	91,459	76,378	77,109

Column Perpendicular and Parallel to Grain Capacities for Parallam (PSL) with Southern Pine Sill Plate

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C.L}	Parallel to Grain, P _c Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-3 1/2x3 1/2	13,843	26,249	26,513	20,779	20,922	16,819	16,904	13,876	13,930	11,636	11,672
	1-3 1/2x5 1/4	20,764	39,373	39,770	31,168	31,383	25,229	25,357	20,815	20,896	17,454	17,508
	1-3 1/2x7	27,685	52,498	53,027	41,558	41,845	33,638	33,809	27,753	27,861	23,272	23,344
6-Inch Wall	1-5 1/4x3 1/2	20,764	78,618	82,323	65,105	66,934	53,972	54,960	45,149	45,729	38,189	38,555
	1-5 1/4x5 1/4	31,146	117,926	123,484	97,657	100,401	80,957	82,439	67,723	68,594	57,284	57,832
	1-5 1/4x7	41,528	157,235	164,646	130,210	133,868	107,943	109,919	90,297	91,459	76,378	77,109

1. See Compression Members: General Notes page 35 for additional information.
2. PSL Grade = 1.8E with F_c=2500 psi.
3. F_{c perp}=565 psi for Southern Pine and F_{c perp}=625 psi for Douglas-Fir Larch
4. Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.

COMPRESSION MEMBER SELECTION

Column Perpendicular and Parallel to Grain Capacities for Timberstrand (LSL) with Douglas Fir Larch Sill Plate

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C⊥}	Parallel to Grain, P _C Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-3 1/2x3 1/2	15,313	18,582	18,870	14,809	14,960	12,032	12,120	9,950	10,005	8,356	8,392
	1-3 1/2x5 1/4	22,969	27,872	28,305	22,213	22,440	18,048	18,180	14,925	15,007	12,534	12,588
	1-3 1/2x7	30,625	37,163	37,740	29,618	29,920	24,064	24,239	19,900	20,009	16,713	16,784
6-Inch Wall	1-5 1/4x3 1/2	22,969	51,443	55,521	44,270	46,392	37,512	38,644	31,766	32,413	27,064	27,460
	1-5 1/4x5 1/4	34,453	77,164	83,281	66,405	69,588	56,268	57,966	47,649	48,619	40,596	41,191
	1-5 1/4x7	45,938	102,886	111,041	88,540	92,784	75,024	77,288	63,532	64,826	54,128	54,921

Column Perpendicular and Parallel to Grain Capacities for Timberstrand (LSL) with Southern Pine Sill Plate

Framing	Lumber Size (Each Side of ATS Rod)	Perp. To Grain, P _{C⊥}	Parallel to Grain, P _C Lbs.									
			Plate Height (ft)									
			8		9		10		11		12	
			(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)	(133)	(160)
4-Inch Wall	1-3 1/2x3 1/2	13,843	18,582	18,870	14,809	14,960	12,032	12,120	9,950	10,005	8,356	8,392
	1-3 1/2x5 1/4	20,764	27,872	28,305	22,213	22,440	18,048	18,180	14,925	15,007	12,534	12,588
	1-3 1/2x7	27,685	37,163	37,740	29,618	29,920	24,064	24,239	19,900	20,009	16,713	16,784
6-Inch Wall	1-5 1/4x3 1/2	20,764	51,443	55,521	44,270	46,392	37,512	38,644	31,766	32,413	27,064	27,460
	1-5 1/4x5 1/4	31,146	77,164	83,281	66,405	69,588	56,268	57,966	47,649	48,619	40,596	41,191
	1-5 1/4x7	41,528	102,886	111,041	88,540	92,784	75,024	77,288	63,532	64,826	54,128	54,921

1. See Compression Members: General Notes page 35 for additional information.
2. LSL Grade = 1.3E with F_c=1400 psi.
3. F_{c perp}=565 psi for Southern Pine and F_{c perp}=625 psi for Douglas-Fir Larch
4. Shaded columns are limited by Parallel to Grain loads.

Refer to the ATS Selector software for alternate grade capacities.