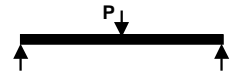


RESIDENTIAL ROOF HEADERS WITH CONCENTRATED CENTER LOAD (L/240)
California Building Code 2007 Edition (CBC), NDS 2005

Lumber: Douglas Fir-Larch, Surfaced-Dry condition (19% maximum moisture content).
 25% Stress increase included due to duration of load.

Design Criteria Strength: Based on allowable bending stresses and shear stresses for Dead + Live loads.
 Deflection: Based on L/360 for Dead plus Live load.



ALLOWABLE CONCENTRATED LOAD AT CENTER OF SPAN (Lbs)

SIZES W x D	GRADE	LENGTH (FEET) THE MEMBER SPANS														
		4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
4 x 4	SS	1675	917	516	330	229	168	129	NOTES 1. Horizontal shear at "d" distance from support controls design in area left of solid line. (Bold Italics) 2. Deflection controls design in area right of double line. (Bold) 3. Bending stress controls design in area between solid and double lines.							
4 x 4	#1+	1340	868	488	313	217	160	122								
4 x 4	#1	1117	744	461	295	205	151	115								
4 x 4	#2	1005	670	434	278	193	142	109								
4 x 6	SS	3584	2390	1792	1281	889	653	500	LENGTH (FEET) THE MEMBER SPANS 18 20 22 24 26 28 30 32							
4 x 6	#1+	2867	1912	1434	1147	842	619	474								
4 x 6	#1	2390	1593	1195	956	796	585	448								
4 x 6	#2	2151	1434	1075	860	717	550	421								
4 x 8	SS	6228	4152	3114	2491	2037	1496	1146	905	733	606	509	434	374	326	286
4 x 8	#1+	4982	3322	2491	1993	1661	1418	1085	858	695	574	482	411	354	309	271
4 x 8	#1	4152	2768	2076	1661	1384	1186	1025	810	656	542	456	388	335	292	256
4 x 8	#2	3737	2491	1868	1495	1246	1068	934	762	617	510	429	365	315	274	241
4 x 10	SS	9358	6239	4679	3743	3119	2674	2340	1880	1523	1259	1058	901	777	677	595
4 x 10	#1+	7487	4991	3743	2995	2496	2139	1872	1664	1443	1192	1002	854	736	641	564
4 x 10	#1	6239	4159	3119	2496	2080	1783	1560	1386	1248	1126	946	806	695	606	532
4 x 10	#2	5615	3743	2808	2246	1872	1604	1404	1248	1123	1021	891	759	654	570	501
4 x 12	SS	11813	8459	6345	5076	4230	3625	3172	2820	2538	2264	1903	1621	1398	1218	1070
4 x 12	#1+	10151	6768	5076	4061	3384	2900	2538	2256	2030	1846	1692	1536	1324	1154	1014
4 x 12	#1	8459	5640	4230	3384	2820	2417	2115	1880	1692	1538	1410	1301	1208	1089	958
4 x 12	#2	7614	5076	3807	3045	2538	2175	1903	1692	1523	1384	1269	1171	1088	1015	901
4 x 14	SS	13913	10668	8001	6401	5334	4572	4000	3556	3200	2909	2667	2462	2284	1989	1748
4 x 14	#1+	12801	8534	6401	5121	4267	3658	3200	2845	2560	2328	2134	1969	1829	1707	1600
4 x 14	#1	10668	7112	5334	4267	3556	3048	2667	2371	2134	1940	1778	1641	1524	1422	1333
4 x 14	#2	9601	6401	4801	3840	3200	2743	2400	2134	1920	1746	1600	1477	1372	1280	1200
4 x 16	SS	16013	14131	10599	8479	7066	6056	5299	4710	4239	3854	3533	3261	3028	2826	2650
4 x 16	#1+	16013	11305	8479	6783	5653	4845	4239	3768	3392	3083	2826	2609	2423	2261	2120
4 x 16	#1	14131	9421	7066	5653	4710	4038	3533	3140	2826	2569	2355	2174	2019	1884	1766
4 x 16	#2	12718	8479	6359	5087	4239	3634	3180	2826	2544	2312	2120	1957	1817	1696	1590
6 x 6	SS	4333	2888	2166	1695	1177	865	662	523	424	350	294	251	216	188	165
6 x 6	#1	3466	2311	1733	1386	1155	865	662	523	424	350	294	251	216	188	165
6 x 8	SS	8057	5371	4028	3223	2686	2192	1678	1326	1074	888	746	636	548	477	420
6 x 8	#1	6445	4297	3223	2578	2148	1842	1611	1326	1074	888	746	636	548	477	420
6 x 10	SS	13788	9192	6894	5515	4596	3939	3411	2695	2183	1804	1516	1292	1114	970	853
6 x 10	#1	11634	7756	5817	4654	3878	3324	2908	2585	2183	1804	1516	1292	1114	970	853
6 x 12	SS	17921	13470	10102	8082	6735	5773	5051	4490	3873	3200	2689	2291	1976	1721	1513
6 x 12	#1	17048	11365	8524	6819	5683	4871	4262	3788	3410	3100	2689	2291	1976	1721	1513
6 x 14	SS	21038	18319	13739	10991	9159	7851	6870	6106	5496	4996	4351	3707	3196	2784	2447
6 x 14	#1	21038	15453	11590	9272	7727	6623	5795	5151	4636	4215	3863	3566	3196	2784	2447
6 x 16	SS	24154	23782	17836	14269	11891	10192	8918	7927	7135	6486	5945	5488	4838	4214	3704
6 x 16	#1	24154	20065	15049	12039	10033	8599	7524	6688	6020	5472	5016	4630	4300	4013	3704
6 x 18	SS	27271	27271	22429	17943	14953	12817	11215	9968	8972	8156	7476	6901	6408	5981	5331
6 x 18	#1	27271	25227	18920	15136	12613	10811	9460	8409	7568	6880	6307	5822	5406	5045	4730
6 x 20	SS	30388	30388	27504	22003	18336	15716	13752	12224	11002	10001	9168	8463	7858	7334	6876
6 x 20	#1	30388	30388	23219	18575	15480	13268	11610	10320	9288	8443	7740	7144	6634	6192	5805
8 x 8	SS	10986	7324	5493	4395	3662	2989	2289	1808	1465	1211	1017	867	747	651	572
8 x 8	#1	8789	5859	4395	3516	2930	2511	2197	1808	1465	1211	1017	867	747	651	572
8 x 10	SS	17627	11751	8813	7051	5876	5036	4407	3675	2977	2460	2067	1762	1519	1323	1163
8 x 10	#1	14102	9401	7051	5641	4701	4029	3525	3134	2820	2460	2067	1762	1519	1323	1163
8 x 12	SS	24438	18368	13776	11021	9184	7872	6888	6123	5281	4364	3667	3125	2694	2347	2063
8 x 12	#1	23247	15498	11624	9299	7749	6642	5812	5166	4649	4227	3667	3125	2694	2347	2063
8 x 14	SS	28688	24980	18735	14988	12490	10706	9368	8327	7494	6813	5933	5055	4359	3797	3337
8 x 14	#1	28688	21073	15804	12644	10536	9031	7902	7024	6322	5747	5268	4863	4359	3797	3337
8 x 16	SS	32938	32430	24322	19458	16215	13898	12161	10810	9729	8844	8107	7484	6597	5747	5051
8 x 16	#1	32938	27362	20521	16417	13681	11726	10261	9121	8209	7462	6840	6314	5863	5472	5051
8 x 18	SS	37188	37188	30585	24468	20390	17477	15293	13593	12234	11122	10195	9411	8739	8156	7269
8 x 18	#1	37188	34400	25800	20640	17200	14743	12900	11467	10320	9382	8600	7938	7371	6880	6450
8 x 20	SS	41438	41438	37505	30004	25003	21432	18753	16669	15002	13638	12502	11540	10716	10001	9376
8 x 20	#1	41438	41438	31663	25330	21108	18093	15831	14072	12665	11514	10554	9742	9046	8443	7916
8 x 22	SS	45688	45688	45112	36089	30074	25778	22556	20050	18045	16404	15037	13880	12889	12030	11278
8 x 22	#1	45688	45688	38069	30456	25380	21754	19035	16920	15228	13843	12690	11714	10877	10152	9517
8 x 24	SS	49938	49938	49938	42684	35570	30489	26678	23714	21342	19402	17785	16417	15244	14228	13339
8 x 24	#1	49938	49938	45014	36011	30009	25722	22507	20006	18006	16369	15005	13851	12861	12004	11254

DIVISION OF BUILDING AND SAFETY
COUNTY OF VENTURA

Jim MacDonald

BUILDING OFFICIAL _____

B & S
STD **B-15**

DATE: 01/01/08