

CANTILEVER RESIDENTIAL ROOF BEAMS (L/240)

California Building Code 2007 Edition (CBC), NDS 2005

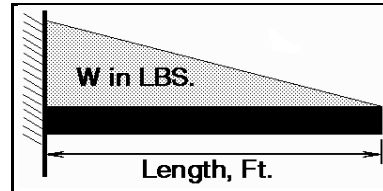
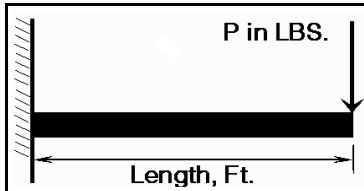
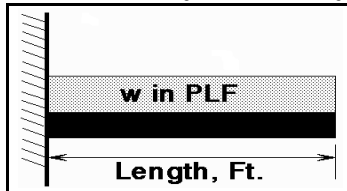
Lumber: Douglas Fir-Larch, Surfaced-Dry condition (19% maximum moisture content).

Design Criteria: Strength: Based on allowable bending stresses and shear stresses for Dead + Live loads.

25% Stress increase included due to duration of load.

Deflection: Based on L/240 for Dead plus Live load.

- 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.



SIZES W x D	GRADE	ALLOWABLE UNIFORM LOAD (PLF) LENGTH (FEET) OF CANTILEVER							ALLOWABLE END POINT LOAD (LBS) LENGTH (FEET) OF CANTILEVER							ALLOWABLE TRIANGULAR LOAD (LBS) LENGTH (FEET) OF CANTILEVER						
		4	6	8	10	12	14	16	4	6	8	10	12	14	16	4	6	8	10	12	14	16
4 x 4	SS	86	25	11	5	3	2	1	129	57	32	21	14	11	8	645	286	161	103	72	53	40
4 x 4	#1+	81	24	10	5	3	2	1	122	54	31	20	14	10	8	611	271	153	98	68	50	38
4 x 4	#1	77	23	10	5	3	2	1	115	51	29	18	13	9	7	577	256	144	92	64	47	36
4 x 4	#2	72	21	9	5	3	2	1	109	48	27	17	12	9	7	543	241	136	87	60	44	34
4 x 6	SS	333	99	42	21	12	8	5	500	222	125	80	56	41	31	2501	1112	625	400	278	204	156
4 x 6	#1+	316	94	39	20	12	7	5	474	211	118	76	53	39	30	2151	1053	592	379	263	193	148
4 x 6	#1	298	88	37	19	11	7	5	448	199	112	72	50	37	28	1792	995	559	358	249	183	140
4 x 6	#2	269	83	35	18	10	7	4	421	187	105	67	47	34	26	1613	936	527	337	234	172	132
4 x 8	SS	764	226	95	49	28	18	12	1146	509	286	183	127	94	72	4671	2546	1432	917	637	468	358
4 x 8	#1+	623	214	90	46	27	17	11	1085	482	271	174	121	89	68	3737	2412	1357	868	603	443	339
4 x 8	#1	519	202	85	44	25	16	11	1025	456	256	164	114	84	64	3114	2076	1281	820	570	418	320
4 x 8	#2	467	191	80	41	24	15	10	934	429	241	154	107	79	60	2803	1868	1206	772	536	394	302
4 x 10	SS	1170	470	198	102	59	37	25	2340	1058	595	381	264	194	149	7019	4679	2974	1904	1322	971	744
4 x 10	#1+	936	416	188	96	56	35	23	1872	1002	564	361	250	184	141	5615	3743	2808	1803	1252	920	704
4 x 10	#1	780	347	177	91	53	33	22	1560	946	532	341	237	174	133	4679	3119	2340	1703	1183	869	665
4 x 10	#2	702	312	167	85	49	31	21	1404	891	501	321	223	164	125	4211	2808	2106	1603	1113	818	626
4 x 12	SS	1586	705	357	183	106	67	45	3172	1903	1070	685	476	349	268	9517	6345	4758	3425	2378	1747	1338
4 x 12	#1+	1269	564	317	173	100	63	42	2538	1692	1014	649	451	331	253	7614	5076	3807	3045	2253	1655	1267
4 x 12	#1	1057	470	264	163	95	60	40	2115	1410	958	613	426	313	239	6345	4230	3172	2538	2115	1563	1197
4 x 12	#2	952	423	238	152	89	56	38	1903	1269	901	577	401	294	225	5710	3807	2855	2284	1903	1471	1127
4 x 14	SS	2000	889	500	298	173	109	73	4000	2667	1748	1119	777	571	437	12001	8001	6001	4801	3885	2855	2186
4 x 14	#1+	1600	711	400	256	164	103	69	3200	2134	1600	1060	736	541	414	9601	6401	4801	3840	3200	2704	2071
4 x 14	#1	1333	593	333	213	148	97	65	2667	1778	1333	1001	695	511	391	8001	5334	4000	3200	2667	2286	1956
4 x 14	#2	1200	533	300	192	133	92	61	2400	1600	1200	942	654	481	368	7201	4801	3600	2880	2400	2057	1800
4 x 16	SS	2650	1178	662	424	263	166	111	5299	3533	2650	1706	1185	870	666	15898	10599	7949	6359	5299	4352	3332
4 x 16	#1+	2120	942	530	339	236	157	105	4239	2826	2120	1616	1122	825	631	12718	8479	6359	5087	4239	3634	3157
4 x 16	#1	1766	785	442	283	196	144	99	3533	2355	1766	1413	1060	779	596	10599	7066	5299	4239	3533	3028	2650
4 x 16	#2	1590	707	397	254	177	130	94	3180	2120	1590	1272	998	733	561	9539	6359	4769	3815	3180	2725	2385
6 x 6	SS	441	131	55	28	16	10	7	662	294	165	106	74	54	41	3250	1471	827	530	368	270	207
6 x 6	#1	433	131	55	28	16	10	7	662	294	165	106	74	54	41	2600	1471	827	530	368	270	207
6 x 8	SS	1007	332	140	72	41	26	17	1678	746	420	269	186	137	105	6042	3730	2098	1343	932	685	525
6 x 8	#1	806	332	140	72	41	26	17	1611	746	420	269	186	137	105	4834	3223	2098	1343	932	685	525
6 x 10	SS	1724	674	284	146	84	53	36	3411	1516	853	546	379	278	213	10341	6894	4264	2729	1895	1392	1066
6 x 10	#1	1454	646	284	146	84	53	36	2908	1516	853	546	379	278	213	8725	5817	4264	2729	1895	1392	1066
6 x 12	SS	2526	1122	504	258	149	94	63	5051	2689	1513	968	672	494	378	15154	10102	7564	4841	3362	2470	1891
6 x 12	#1	2131	947	504	258	149	94	63	4262	2689	1513	968	672	494	378	12786	8524	6393	4841	3362	2470	1891
6 x 14	SS	3435	1527	816	418	242	152	102	6870	4351	2447	1566	1088	799	612	20361	13739	10304	7831	5438	3995	3059
6 x 14	#1	2897	1288	724	418	242	152	102	5795	3863	2447	1566	1088	799	612	17385	11590	8692	6954	5438	3995	3059
6 x 16	SS	4459	1982	1115	632	366	230	154	8918	5945	3704	2371	1646	1209	926	26344	17836	13377	10702	8231	6047	4630
6 x 16	#1	3762	1672	941	602	366	230	154	7524	5016	3704	2371	1646	1209	926	22573	15049	11287	9029	7524	6047	4630
6 x 18	SS	5365	2492	1402	897	526	332	222	11215	7476	5331	3412	2369	1741	1333	33644	22429	16822	13457	11215	8703	6663
6 x 18	#1	4730	2102	1182	757	526	332	222	9460	6307	4730	3412	2369	1741	1333	28380	18920	14190	11352	9460	8109	6663
6 x 20	SS	6397	3056	1719	1100	728	459	307	13752	9168	6876	4720	3278	2408	1844	41256	27504	20628	16502	13752	11787	9219
6 x 20	#1	5805	2580	1451	929	645	459	307	11610	7740	5805	4644	3278	2408	1844	34829	23219	17415	13932	11610	9951	8707
8 x 8	SS	1373	452	191	98	57	36	24	2289	1017	572	366	254	187	143	8240	5086	2861	1831	1272	934	715
8 x 8	#1	1099	452	191	98	57	36	24	2197	1017	572	366	254	187	143	6592	4395	2861	1831	1272	934	715
8 x 10	SS	2203	919	388	198	115	72	48	4407	2067	1163	744	517	380	291	13220	8813	5814	3721	2584	1899	1454
8 x 10	#1	1763	783	388	198	115	72	48	3525	2067	1163	744	517	380	291	10576	7051	5288	3721	2584	1899	1454
8 x 12	SS	3444	1531	688	352	204	128	86	6888	3667	2063	1320	917	674	516	20664	13776	10314	6601	4584	3368	2579
8 x 12	#1	2906	1292	688	352	204	128	86	5812	3667	2063	1320	917	674	516	17435	11624	8718	6601	4584	3368	2579
8 x 14	SS	4684	2082	1112	570	330	208	139	9368	5933	3337	2136	1483	1090	834	27766	18735	14051	10679	7416	5448	4171
8 x 14	#1	3951	1756	988	570	330	208	139	7902	5268	3337	2136	1483	1090	834	23707	15804	11853	9483	7416	5448	4171
8 x 16	SS	6081	2702	1520	862	499	314	210	12161	8107	5051	3233	2245	1649	1263	35923	24322	18242	14593	11224	8246	6314
8 x 16	#1	5130	2280	1283	821	499	314	210	10261	6840	5051	3233	2245	1649	1263	30782	20521	15391	12313	10261	8246	6314

**DIVISION OF BUILDING AND SAFETY
COUNTY OF VENTURA**

BUILDING OFFICIAL _____

Jim MacDonald

B & S
STD

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