

CANTILEVER RESIDENTIAL ROOF BEAMS (L/240)

California Building Code 2007 Edition (CBC), NDS 2005

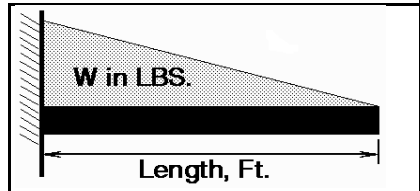
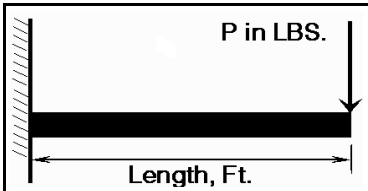
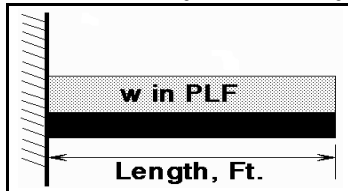
Lumber: Douglas Fir-Larch, Surfaced-Dry condition (19% maximum moisture content).

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	3633	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 **B-24**

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