

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

**ROOF BEAMS
 CONSTRUCTION LOAD**

**Structural Glued Laminated Timber
 Douglas Fir-Larch**



F_b **F_v** **E** **C_D** **Deflection limit.**
 2400 265 1.8 1.00 **Span / 240 for TOTAL LOAD**
 psi psi million
 psi

BEAM SIZE		BEAM Wt plf	BEAM CAPACITY, UNIFORM LOAD w, plf																
			SPANS, ft																
			8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40
3 1/8 x 6	4.6		439	225	130	82	55	39	28	21	16	13	10	8	7	6	5	4	4
3 1/8 x 7 1/2	5.7		858	439	254	160	107	75	55	41	32	25	20	16	13	11	9	8	7
3 1/8 x 9	6.8		1318	759	439	277	185	130	95	71	55	43	35	28	23	19	16	14	12
3 1/8 x 10 1/2	8.0		1794	1148	698	439	294	207	151	113	87	69	55	45	37	31	26	22	19
3 1/8 x 12	9.1		2344	1500	1042	656	439	309	225	169	130	102	82	67	55	46	39	33	28
3 1/8 x 13 1/2	10.3		2966	1898	1318	934	626	439	320	241	185	146	117	95	78	65	55	47	40
3 1/8 x 15	11.4		3662	2344	1628	1196	858	603	439	330	254	200	160	130	107	89	75	64	55
3 1/8 x 16 1/2	12.5		4338	2836	1969	1447	1108	802	585	439	338	266	213	173	143	119	100	85	73
3 1/8 x 18	13.7		4969	3375	2344	1722	1318	1042	759	571	439	346	277	225	185	155	130	111	95
3 1/8 x 19 1/2	14.8		5666	3961	2751	2021	1547	1223	965	725	559	439	352	286	236	197	166	141	121
5 1/8 x 6	7.5		721	369	214	134	90	63	46	35	27	21	17	14	11	9	8	7	6
5 1/8 x 7 1/2	9.3		1408	721	417	263	176	124	90	68	52	41	33	27	22	18	15	13	11
5 1/8 x 9	11.2		2162	1245	721	454	304	214	156	117	90	71	57	46	38	32	27	23	19
5 1/8 x 10 1/2	13.1		2943	1883	1144	721	483	339	247	186	143	113	90	73	60	50	42	36	31
5 1/8 x 12	14.9		3844	2460	1708	1076	721	506	369	277	214	168	134	109	90	75	63	54	46
5 1/8 x 13 1/2	16.8		4865	3113	2162	1532	1026	721	525	395	304	239	191	156	128	107	90	77	66
5 1/8 x 15	18.7		6006	3844	2669	1961	1408	989	721	541	417	328	263	214	176	147	124	105	90
5 1/8 x 16 1/2	20.6		7114	4651	3230	2373	1808	1316	959	721	555	437	350	284	234	195	164	140	120
5 1/8 x 18	22.4		8149	5535	3844	2824	2133	1666	1245	936	721	567	454	369	304	253	214	182	156
5 1/8 x 19 1/2	24.3		9292	6496	4511	3288	2484	1940	1555	1190	916	721	577	469	387	322	271	231	198
5 1/8 x 21	26.2		10563	7313	5232	3785	2859	2233	1790	1465	1144	900	721	586	483	403	339	288	247
5 1/8 x 22 1/2	28.0		11983	8149	5965	4315	3260	2546	2040	1670	1391	1107	886	721	594	495	417	355	304
5 1/8 x 24	29.9		13581	9054	6743	4878	3685	2878	2306	1888	1573	1329	1076	875	721	601	506	430	369
5 1/8 x 26 1/2	33.0		16740	10743	7910	5889	4449	3474	2784	2279	1899	1605	1374	1177	970	809	681	579	497
6 3/4 x 6	9.8		949	486	281	177	119	83	61	46	35	28	22	18	15	12	10	9	8
6 3/4 x 7 1/2	12.3		1854	949	549	346	232	163	119	89	69	54	43	35	29	24	20	17	15
6 3/4 x 9	14.8		2848	1640	949	598	400	281	205	154	119	93	75	61	50	42	35	30	26
6 3/4 x 10 1/2	17.2		3876	2481	1507	949	636	447	326	245	188	148	119	96	79	66	56	47	41
6 3/4 x 12	19.7		5063	3240	2250	1417	949	667	486	365	281	221	177	144	119	99	83	71	61
6 3/4 x 13 1/2	22.1		6407	4101	2848	2017	1352	949	692	520	400	315	252	205	169	141	119	101	86
6 3/4 x 15	24.6		7910	5063	3516	2559	1854	1302	949	713	549	432	346	281	232	193	163	138	119
6 3/4 x 16 1/2	27.1		9370	6126	4239	3067	2317	1733	1263	949	731	575	460	374	308	257	217	184	158
6 3/4 x 18	29.5		10733	7290	5001	3618	2734	2135	1640	1232	949	747	598	486	400	334	281	239	205
6 3/4 x 19 1/2	32.0		12239	8539	5823	4213	3183	2485	1992	1567	1207	949	760	618	509	424	358	304	261
6 3/4 x 21	34.5		13913	9632	6703	4850	3664	2861	2293	1877	1507	1186	949	772	636	530	447	380	326
6 3/4 x 22 1/2	36.9		15783	10733	7642	5529	4177	3262	2614	2140	1783	1458	1167	949	782	652	549	467	400
6 3/4 x 24	39.4		17888	11925	8639	6250	4722	3687	2955	2419	2015	1703	1417	1152	949	791	667	567	486
6 3/4 x 26 1/2	43.5		22047	14150	10418	7545	5700	4451	3568	2920	2433	2056	1760	1523	1278	1065	897	763	654
6 3/4 x 27	44.3		22998	14635	10733	7818	5906	4612	3696	3026	2521	2131	1824	1578	1352	1127	949	807	692
6 3/4 x 28 1/2	46.8		26143	16184	11719	8664	6545	5111	4096	3353	2793	2361	2021	1748	1527	1325	1116	949	814

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.

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

**B & S
 STD B-47**

BUILDING OFFICIAL _____ *Jim MacDonald*

DATE: 01/01/08