

Line 1: TL deflection L/240  
 Line 2: LL deflection L/360  
 See PLF chart notes # 3 & 4 on p.10

## Allowable Loads for KRB Glulam in PLF LDF = 1.00

## Floor Load Conditions

### 3-1/2" Width

### 5-1/2" Width

### 7" Width

Actual Span	5-1/2	7-1/4	9-1/4	9-1/2	11-1/4	11-7/8	12	13-1/2	14	16	18	9-1/4	9-1/2	11-1/4	11-7/8	14	16	18	9-1/2	11-7/8	14	16	18
6'	875 599	1461 1372	2294 2294	2410 2410	3250 3250	3520 3520	3575 3575	4291 4291	4551 4551	5723 5723	7155 7155	3605 3605	3788 3788	5107 5107	5531 5531	7152 7152	8993 8993	11244 11244	4821 4821	7040 7040	9103 9103	11446 11446	14310 14310
7'	562 377	1072 864	1684 1684	1769 1769	2420 2420	2675 2675	2727 2727	3386 3386	3574 3574	4400 4400	5363 5363	2646 2646	2780 2780	3803 3803	4203 4203	5616 5616	6914 6914	8428 8428	3538 3538	5350 5350	7148 7148	8799 8799	10726 10726
8'	375 253	819 579	1288 1202	1353 1302	1851 1851	2046 2046	2086 2086	2595 2595	2776 2776	3555 3555	4288 4288	2023 1889	2126 2047	2909 2909	3215 3215	4362 4362	5587 5587	6738 6738	2706 2605	4092 4092	5552 5552	7110 7110	8576 8576
9'	262 178	605 407	1016 844	1067 915	1461 1461	1615 1615	1646 1646	2048 2048	2191 2191	2807 2807	3491 3491	1596 1327	1677 1437	2295 2295	2538 2538	3443 3443	4410 4410	5486 5486	2135 1829	3230 3230	4382 4382	5613 5613	6983 6983
10'	190 129	439 296	822 616	863 667	1182 1107	1306 1302	1332 1332	1657 1657	1773 1773	2271 2271	2825 2825	1291 967	1357 1048	1857 1740	2053 2047	2786 2786	3569 3569	4440 4440	1727 1334	2613 2605	3546 3546	4542 4542	5651 5651
11'	142 97	329 223	678 462	712 501	975 832	1078 979	1099 1010	1368 1368	1464 1464	1875 1875	2333 2333	1065 727	1119 787	1532 1307	1694 1538	2300 2300	2946 2946	3666 3666	1425 1025	2156 1957	2927 2927	3750 3750	4666 4666
12'	108 75	252 172	528 356	572 386	818 641	905 754	922 778	1148 1107	1228 1228	1574 1574	1958 1958	829 560	899 606	1286 1007	1422 1184	1930 1930	2473 2473	3077 3077	1144 772	1809 1507	2456 2456	3147 3147	3916 3916
13'	84 59	197 135	414 280	448 304	696 504	770 593	785 612	977 871	1045 971	1339 1339	1667 1667	650 440	705 477	1094 792	1209 932	1642 1527	2104 2104	2619 2619	897 607	1539 1186	2090 1943	2678 2678	3333 3333
14'	67 47	157 108	330 224	358 243	597 404	662 475	675 490	841 697	900 778	1153 1153	1435 1435	518 353	562 382	939 634	1041 746	1414 1222	1812 1812	2255 2255	715 486	1325 949	1799 1556	2306 2306	2871 2871
15'	54 38	127 88	267 182	290 198	484 328	570 386	587 398	731 567	782 632	1003 944	1249 1249	420 287	455 310	761 516	896 606	1230 994	1576 1483	1962 1962	579 395	1141 772	1565 1265	2006 1888	2497 2497
16'	43 32	103 72	219 150	237 163	397 270	468 318	484 328	641 467	686 521	880 778	1096 1096	344 236	373 256	625 425	736 500	1079 819	1383 1222	1722 1722	475 326	937 636	1373 1042	1760 1556	2192 2192
17'	36 26	85 60	181 125	197 136	330 225	389 265	402 274	567 390	607 434	778 648	969 923	285 197	309 213	519 354	611 417	954 683	1223 1019	1523 1451	394 271	778 530	1214 869	1557 1297	1938 1847
18'	29 22	71 51	152 106	165 114	277 190	326 223	337 230	483 328	539 366	693 546	863 778	238 166	259 180	435 298	513 351	847 575	1089 858	1356 1222	329 229	653 447	1078 732	1386 1093	1726 1556
19'	24 19	60 43	128 90	139 97	234 161	276 190	285 196	409 279	457 311	621 464	773 661	201 141	218 153	368 254	434 298	718 489	976 730	1215 1039	278 194	553 380	913 622	1242 929	1547 1323
20'	20 16	50 37	109 77	118 83	200 138	236 163	243 168	349 239	390 267	559 398	697 567	171 121	186 131	314 218	370 256	613 419	879 626	1095 891	236 167	471 326	780 534	1118 796	1393 1134
21'	17 14	43 32	93 66	101 72	171 120	202 141	209 145	300 207	336 230	505 344	631 490	146 104	159 113	269 188	318 221	527 362	793 541	991 770	202 144	405 281	671 461	1009 688	1261 980
22'	14 12	37 28	80 58	87 63	148 104	175 122	181 126	260 180	291 200	437 299	574 426	126 91	137 98	232 163	275 192	457 315	687 470	901 669	174 125	350 245	581 401	875 598	1147 852
23'	12 11	31 24	69 51	75 55	128 91	152 107	157 110	226 157	253 175	381 262	524 373	109 80	118 86	202 143	239 168	398 276	599 411	823 586	151 110	304 214	506 351	763 524	1047 746
24'	10 9	27 21	60 45	66 48	112 80	133 94	137 97	198 138	222 154	334 230	479 328	95 70	103 76	176 126	209 148	348 243	525 362	753 516	131 96	266 188	443 309	668 461	959 656
25'	8 8	23 19	52 39	57 43	98 71	117 83	120 86	174 122	195 137	294 204	423 290	82 62	90 67	154 111	183 131	306 215	463 320	664 456	114 85	233 167	390 273	589 408	845 581
26'	7 7	20 17	46 35	50 38	86 63	103 74	106 76	154 109	172 121	260 181	374 258	72 55	79 60	136 99	161 116	270 191	409 285	588 406	100 76	205 148	344 243	521 363	748 516
27'	6 6	17 15	40 31	44 34	76 56	91 66	94 68	136 97	153 108	231 162	333 230	63 49	69 53	120 88	143 104	240 170	363 254	523 362	88 68	181 132	305 217	463 324	666 461
28'	5 5	15 14	35 28	39 30	68 50	80 59	83 61	121 87	136 97	206 145	297 207	56 44	61 48	106 79	126 93	213 153	324 228	467 325	78 61	161 119	272 194	412 290	594 413
29'	4 4	13 12	31 25	34 27	60 45	72 53	74 55	108 78	121 88	184 131	266 186	49 40	54 43	94 71	112 84	190 138	290 205	418 292	68 55	143 107	242 175	369 261	532 372
30'	3 3	11 11	28 23	30 25	53 41	64 48	66 50	97 71	109 79	166 118	239 168	43 36	48 39	84 64	100 76	171 124	260 185	376 264	60 49	128 96	217 158	331 236	478 336
31'	3 3	10 10	24 21	27 22	48 37	57 44	59 45	87 64	97 72	149 107	215 152	38 32	42 35	75 58	90 69	153 113	234 168	339 239	54 45	114 87	195 143	298 214	431 305
32'	2 2	8 8	22 19	24 20	43 34	51 40	53 41	78 58	88 65	134 97	195 138	34 30	37 32	67 53	80 62	138 102	211 153	306 218	47 41	102 79	175 130	269 194	389 277
33'	1 1	7 7	19 17	21 19	38 31	46 36	47 37	70 53	79 59	122 89	176 126	30 27	33 29	60 48	72 57	124 93	191 139	277 198	42 37	92 72	158 119	243 177	353 252
34'	1 1	6 6	17 16	19 17	34 28	41 33	43 34	63 49	71 54	110 81	160 115	26 25	29 27	54 44	65 52	112 85	173 127	252 181	37 34	82 66	143 109	220 162	320 231
35'	1 1	5 5	15 14	17 16	31 26	37 30	38 31	57 45	65 50	100 74	146 106	23 23	26 24	48 41	58 48	102 78	157 117	229 166	33 31	74 61	129 100	200 149	292 212
36'	0 0	4 4	13 13	15 14	28 24	33 28	35 29	52 41	59 46	91 68	133 97	21 21	23 22	43 37	52 44	92 72	143 107	209 153	29 29	67 56	117 91	182 137	266 194
37'	n/a n/a	4 4	12 12	13 13	25 22	30 26	31 27	47 38	53 42	83 63	121 90	18 18	20 20	39 34	47 40	84 66	130 99	191 141	26 26	60 51	106 84	166 126	243 179
38'	n/a n/a	3 3	10 10	11 11	22 20	27 24	28 24	43 35	48 39	76 58	111 83	16 16	18 18	35 32	43 37	76 61	119 91	175 130	23 23	54 47	87 78	151 116	222 165
39'	n/a n/a	2 2	9 9	10 10	20 19	24 22	25 23	39 32	44 36	69 54	102 76	14 14	16 16	31 29	38 35	69 57	109 84	160 120	20 20	49 44	88 72	138 107	204 153
40'	n/a n/a	2 2	8 8	9 9	18 17	22 20	23 21	35 30	40 33	63 50	93 71	12 12	14 14	28 27	35 32	63 52	99 78	147 111	18 18	44 41	80 67	126 100	187 142

Line 1: TL deflection L/240  
 Line 2: LL deflection L/360  
 See PLF chart notes # 3 & 4 on p.10

**Allowable Loads for KRB Glulam in PLF LDF = 1.00**

**Floor Load Conditions**

**3-1/8" Width**

**5-1/8" Width**

Actual Span	7-1/4	9-1/4	9-1/2	11-1/4	11-7/8	13-1/2	14	15-1/8	16	18	19-1/4	22	24	9-1/4	9-1/2	11-7/8	14	15-1/8	16	18	19-1/4	22	24
6'	1304	2048	2152	2902	3143	3831	4064	4627	5110	6388	7343	10043	11971	3359	3529	5154	6665	7589	8380	10477	12042	16471	26815
	1225	2048	2152	2902	3143	3831	4064	4627	5110	6388	7343	10043	11971	3359	3529	5154	6665	7589	8380	10477	12042	16471	26815
7'	957	1503	1580	2161	2388	3023	3191	3592	3928	4788	5403	7026	8518	2465	2590	3917	5233	5891	6442	7853	8861	11523	19080
	772	1503	1580	2161	2388	3023	3191	3592	3928	4788	5403	7026	8518	2465	2590	3917	5233	5891	6442	7853	8861	11523	19080
8'	732	1150	1208	1653	1827	2317	2479	2860	3174	3828	4273	5401	6385	1885	1981	2996	4065	4691	5206	6279	7008	8858	14302
	517	1073	1163	1653	1827	2317	2479	2860	3174	3828	4273	5401	6385	1761	1907	2996	4065	4691	5206	6279	7008	8858	14302
9'	540	907	953	1304	1442	1829	1956	2258	2506	3117	3530	4386	5105	1488	1563	2365	3209	3703	4110	5112	5790	7193	11434
	363	754	817	1304	1442	1829	1956	2258	2506	3117	3530	4386	5105	1236	1339	2365	3209	3703	4110	5112	5790	7193	11434
10'	392	734	771	1055	1166	1480	1583	1827	2028	2523	2857	3659	4251	1203	1264	1913	2596	2996	3326	4137	4686	6001	9523
	265	550	595	989	1163	1480	1583	1827	2028	2523	2857	3659	4251	901	976	1907	2596	2996	3326	4137	4686	6001	9523
11'	294	605	636	871	963	1221	1307	1508	1674	2083	2359	3022	3551	993	1043	1579	2143	2474	2746	3416	3869	4956	7954
	199	413	447	743	874	1221	1307	1508	1674	2083	2359	3022	3551	677	734	1433	2143	2474	2746	3416	3869	4956	7954
12'	225	471	511	730	808	1025	1097	1266	1405	1748	1980	2537	2981	773	838	1325	1798	2076	2304	2867	3248	4161	6678
	153	318	345	572	673	989	1097	1266	1405	1748	1980	2537	2981	522	565	1104	1798	2076	2304	2867	3248	4161	6678
13'	176	369	400	621	687	872	933	1077	1196	1488	1686	2160	2538	606	657	1127	1530	1766	1961	2440	2764	3542	5685
	120	250	271	450	529	778	867	1077	1196	1488	1686	2160	2538	410	444	868	1422	1766	1961	2440	2764	3542	5685
14'	140	295	319	533	591	751	803	927	1030	1281	1452	1860	2186	483	524	970	1317	1521	1689	2102	2381	3051	4897
	96	200	217	360	424	623	694	876	1030	1281	1452	1860	2186	328	356	695	1139	1436	1689	2102	2381	3051	4897
15'	113	238	259	432	509	653	699	807	896	1115	1263	1619	1902	391	424	835	1146	1323	1469	1828	2071	2654	4262
	78	163	176	293	345	506	565	712	843	1115	1263	1619	1902	267	289	565	926	1168	1382	1828	2071	2654	4262
16'	92	195	212	355	418	573	613	708	786	978	1109	1421	1670	320	348	686	1005	1161	1289	1605	1818	2330	3741
	65	134	145	241	284	417	465	587	694	978	1109	1421	1670	220	238	466	763	962	1139	1605	1818	2330	3741
17'	76	162	176	295	347	506	542	626	695	865	981	1257	1478	265	288	570	889	1026	1140	1419	1608	2062	3310
	54	112	121	201	237	348	388	489	579	824	981	1257	1478	183	199	388	636	802	949	1352	1608	2062	3310
18'	63	135	147	247	291	431	481	557	619	771	873	1120	1316	222	241	478	789	914	1015	1264	1432	1836	2949
	45	94	102	170	199	293	327	412	488	694	849	1120	1316	155	167	327	536	676	800	1139	1393	1836	2949
19'	53	114	124	209	247	365	408	499	554	690	783	1004	1180	187	204	405	669	819	909	1132	1283	1646	2643
	39	80	87	144	170	249	278	350	415	590	722	1004	1180	131	142	278	456	575	680	968	1184	1646	2643
20'	45	97	106	178	210	312	348	441	499	622	705	904	1063	159	173	345	571	723	819	1020	1156	1483	2382
	33	69	74	124	145	214	238	300	356	506	619	904	1063	113	122	238	391	493	583	830	1016	1483	2382
21'	38	83	90	153	181	268	300	380	450	563	638	819	963	136	148	296	491	622	739	924	1047	1343	2157
	29	59	64	107	126	184	206	259	307	437	535	798	963	97	105	206	337	426	504	717	877	1309	2157
22'	33	72	78	132	156	232	259	329	390	512	581	745	876	117	128	256	426	539	640	840	952	1222	1963
	25	52	56	93	109	160	179	226	267	380	465	694	876	85	92	179	293	370	438	624	763	1139	1963
23'	28	62	67	115	136	202	226	287	340	468	530	680	800	101	110	223	371	470	558	767	869	1116	1793
	22	45	49	81	96	140	157	197	234	333	407	608	789	74	80	157	257	324	383	546	668	997	1767
24'	24	54	59	100	119	177	198	251	298	428	486	624	734	88	96	194	324	412	489	702	797	1023	1644
	19	40	43	72	84	124	138	174	206	293	358	535	694	65	71	138	226	285	337	480	588	877	1556
25'	21	47	51	88	104	155	174	221	263	377	447	574	675	77	84	171	285	362	431	619	733	941	1512
	17	35	38	63	74	109	122	154	182	259	317	473	614	58	62	122	200	252	299	425	520	776	1376
26'	18	41	45	77	92	137	154	195	233	334	410	529	623	67	73	150	252	320	381	548	673	868	1395
	15	31	34	56	66	97	108	137	162	230	282	421	546	51	56	109	178	224	265	378	462	690	1223
27'	16	36	39	68	81	122	136	173	207	297	365	490	577	59	64	133	223	284	339	487	599	803	1291
	13	28	30	50	59	87	97	122	145	206	252	376	488	46	50	97	159	200	237	337	413	616	1093
28'	13	32	35	60	72	108	121	155	184	265	326	454	535	52	57	118	199	253	302	435	535	745	1198
	12	25	27	45	53	78	87	109	130	184	226	337	437	41	44	87	142	180	213	303	370	552	980
29'	12	28	31	54	64	96	108	138	165	238	292	423	498	46	50	105	178	226	270	390	479	693	1115
	11	23	24	41	48	70	78	99	117	166	203	303	394	37	40	78	128	162	191	272	333	497	882
30'	10	25	27	48	57	86	97	124	148	213	263	394	464	40	44	93	159	203	242	350	431	646	1040
	10	20	22	37	43	63	71	89	105	150	183	274	356	33	36	71	116	146	173	246	301	449	796
31'	9	22	24	43	51	77	87	111	133	192	237	358	434	36	39	84	143	183	218	316	389	588	971
	9	18	20	33	39	57	64	81	95	136	166	248	322	30	33	64	105	132	157	223	273	407	722
32'	7	19	21	38	46	70	78	100	120	174	214	324	406	32	35	75	128	165	197	285	352	532	910
	7	17	18	30	35	52	58	73	87	124	151	226	293	28	30	58	95	120	142	203	248	370	656
33'	6	17	19	34	41	63	71	91	108	158	194	295	381	28	31	67	116	149	178	258	319	483	853
	6	15	17	28	32	48	53	67	79	113	138	206	267	25	27	53	87	110	130	185	226	337	598
34'	5	15	17	31	37	57	64	82	98	143	177	268	351	25	27	60	105	135	161	235	290	440	786
	5	14	15	25	30	43	48	61	72	103	126	188	244	23	25	49	80	100	119	169	207	309	547
35'	5	13	15	27	33	51	58	74	89	130	161	245	320	22	24</								

# PLF CHART NOTES

(REFERENCE PAGES 4-9)

1. Floor Systems are designed using LDF=1.0. The Live Load Deflection Limit is  $l/360$  and the Total Load Deflection Limit is  $l/240$ .
2. Roof Systems are designed using LDF=1.15 or 1.25. The Live Load Deflection Limit is  $l/240$  and the Total Load Deflection Limit is  $l/180$ .
3. The first line of each table indicates the allowable load carrying capacity in pounds per lineal foot (plf) with a deflection limit based on the total load and includes the weight of the member.
4. The second line of each table indicates the allowable load carrying capacity in pounds per lineal foot (plf) with a deflection limit based on the live load.
5. Each table shows spans from 6 to 40 feet.
6. Values provided are the maximum uniform loads in pounds per lineal foot (plf) that can be applied to the beam in addition to its own weight. Allowable plf loads are based on the minimum bearing length required to carry the load.
7. Interpolation between clear openings is permitted.
8. For live load deflection factors of  $l/180$  and  $l/360$ , multiply the Maximum Live Load figure (row 2) by 1.333 and 0.667, respectively. The result shall not exceed the total load.
9. "Actual Span," which is also the design span, is assumed to be the clear opening plus  $1/2$  the actual required bearing length at each end. For example, if the clear opening is 18 feet and the bearing length on each side of the clear opening is two trimmers (3 inches), the actual span is 18 feet 3 inches and this is the span that should be used to select the plf allowable load.
11. These tables are for gravity loads only. Consult a professional engineer for wind and seismic load analysis and design.
12. All tables are based on uniform load conditions. Any concentrated load applications must be analyzed separately or converted to an equivalent uniform load.
13. The compression edge of the header or beam must be laterally supported at intervals of 24" or less. In addition, lateral support must be provided at bearing points.
14. Allowable total and live plf loads used to select a header or beam must be equal to or greater than the actual plf loads applied.