

Line 1: TL deflection L/180
 Line 2: LL deflection L/240
 See PLF chart notes # 3 & 4 on p.10

Allowable Loads for KRB Glulam in PLF LDF = 1.15

Snow 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'	1007 899	1681 1681	2639 2639	2773 2773	3739 3739	4049 4049	4113 4113	4936 4936	5236 5236	6583 6583	8230 8230	4147 4147	4357 4357	5875 5875	6363 6363	8227 8227	10345 10345	12933 12933	5546 5546	8098 8098	10471 10471	13166 13166	16461 16461
7'	739 566	1233 1233	1937 1937	2035 2035	2784 2784	3077 3077	3138 3138	3895 3895	4112 4112	5061 5061	6169 6169	3044 3044	3199 3199	4375 4375	4836 4836	6461 6461	7953 7953	9695 9695	4071 4071	6155 6155	8223 8223	10123 10123	12339 12339
8'	502 379	943 868	1482 1482	1557 1557	2130 2130	2354 2354	2400 2400	2986 2986	3194 3194	4090 4090	4933 4933	2328 2328	2446 2446	3347 3347	3699 3699	5019 5019	6427 6427	7752 7752	3114 3114	4708 4708	6388 6388	8180 8180	9866 9866
9'	351 266	744 610	1169 1169	1229 1229	1681 1681	1858 1858	1895 1895	2357 2357	2521 2521	3229 3229	4017 4017	1838 1838	1931 1931	2642 2642	2920 2920	3962 3962	5075 5075	6312 6312	2457 2457	3717 3717	5043 5043	6459 6459	8034 8034
10'	255 194	588 445	946 923	994 994	1360 1360	1504 1504	1533 1533	1907 1907	2040 2040	2614 2614	3251 3251	1486 1451	1562 1562	2137 2137	2363 2363	3206 3206	4107 4107	5109 5109	1988 1988	3007 3007	4081 4081	5227 5227	6503 6503
11'	191 146	440 334	781 694	820 752	1123 1123	1241 1241	1266 1266	1575 1575	1685 1685	2158 2158	2685 2685	1227 1090	1289 1181	1764 1764	1950 1950	2647 3391	3391 4219	4219 4219	1640 1503	2482 2482	3369 3369	4316 4316	5369 5369
12'	146 112	338 257	655 534	688 579	942 942	1042 1042	1062 1062	1322 1322	1414 1414	1811 1811	2254 2254	1029 840	1081 910	1480 1480	1637 1637	2222 2222	2847 2847	3542 3542	1376 1158	2083 2083	2828 2828	3623 3623	4508 4508
13'	114 88	265 202	554 420	585 455	802 756	886 886	904 904	1125 1125	1203 1203	1542 1542	1919 1919	870 660	920 715	1260 1188	1393 1393	1891 1891	2423 2423	3015 3015	1171 911	1772 1772	2407 2407	3084 3084	3837 3837
14'	90 71	211 162	442 337	479 365	690 605	763 712	778 735	968 968	1036 1036	1328 1328	1652 1652	695 529	753 573	1084 951	1199 1119	1628 2087	2087 2597	2597 2597	958 729	1526 1424	2072 2072	2656 2656	3305 3305
15'	73 58	170 132	358 274	388 296	600 492	664 579	677 597	842 842	901 901	1155 1155	1438 1438	563 430	610 466	943 773	1043 910	1416 1416	1815 1815	2259 2259	777 593	1327 1158	1803 1803	2310 2310	2876 2876
16'	59 47	140 109	294 225	319 244	526 406	582 477	594 492	739 701	791 782	1014 1014	1262 1262	462 354	501 384	827 637	915 750	1243 1228	1593 1593	1983 1983	638 488	1164 954	1582 1563	2028 2028	2524 2524
17'	49 40	115 90	244 188	265 204	443 338	515 398	525 410	654 584	699 652	897 897	1117 1117	383 295	416 320	696 531	809 625	1099 1024	1409 1409	1755 1755	529 407	1029 795	1399 1303	1794 1794	2233 2233
18'	40 33	96 76	204 158	222 172	372 285	438 335	452 346	582 492	623 549	799 799	995 995	321 249	349 270	584 448	689 526	979 863	1255 1255	1563 1563	444 343	876 670	1246 1098	1597 1597	1989 1989
19'	34 28	81 65	173 135	188 146	315 242	371 285	383 294	521 418	558 467	716 697	891 891	272 212	295 229	495 381	583 448	877 733	1125 1095	1401 1401	375 292	743 570	1116 933	1431 1393	1783 1783
20'	28 24	69 56	147 115	160 125	269 208	317 244	327 252	469 359	503 400	645 597	803 803	231 181	251 196	422 326	498 384	790 629	1013 939	1262 1262	320 250	634 488	1005 800	1290 1195	1606 1606
21'	24 21	59 48	126 100	137 108	231 179	273 211	282 218	404 310	451 346	584 516	727 727	198 157	216 170	363 282	429 332	709 543	917 811	1143 1143	274 216	546 422	902 691	1168 1032	1455 1455
22'	20 18	50 42	109 87	118 94	200 156	236 183	244 189	350 270	391 301	531 449	662 639	171 136	186 148	314 245	371 288	614 472	834 705	1040 1004	237 188	472 367	782 601	1062 898	1323 1278
23'	17 16	44 37	95 76	103 82	174 137	206 161	212 166	305 236	341 263	485 393	604 559	149 119	162 129	273 215	323 252	536 413	762 617	949 879	206 164	411 321	682 526	970 786	1208 1118
24'	15 14	38 32	82 67	90 72	152 120	180 141	186 146	267 208	299 232	444 346	554 492	130 105	141 114	239 189	283 222	469 364	698 543	870 773	179 145	360 283	597 463	889 691	1108 984
25'	13 12	33 28	72 59	79 64	134 106	158 125	163 129	235 184	263 205	396 306	509 435	113 93	123 101	210 167	249 196	414 322	623 481	800 684	157 128	316 250	526 410	793 612	1019 871
26'	11 11	29 25	63 53	69 57	118 95	140 111	144 115	208 163	233 182	351 272	470 387	100 83	109 89	185 149	220 175	366 286	552 427	739 608	138 114	279 222	466 364	702 544	940 774
27'	9 9	25 23	56 47	61 51	104 84	124 99	128 102	185 146	207 163	312 243	435 346	88 74	96 80	164 133	195 156	325 256	491 382	683 543	122 102	248 199	414 325	624 486	870 691
28'	8 8	22 20	49 42	54 46	93 76	110 89	114 92	165 131	184 146	279 218	400 310	78 66	85 72	146 119	173 140	290 229	438 342	629 487	108 91	220 178	369 292	558 435	801 620
29'	7 7	19 18	44 38	48 41	83 68	98 80	102 83	147 118	165 131	250 196	359 279	69 59	75 64	130 107	154 126	259 206	393 308	564 438	96 82	197 160	330 263	500 392	718 558
30'	6 6	17 16	39 34	43 37	74 62	88 72	91 75	132 106	148 119	225 177	323 252	61 54	67 58	116 97	138 114	233 186	353 278	508 396	85 74	176 145	296 237	449 354	646 504
31'	5 5	15 15	35 31	38 34	66 56	79 66	82 68	119 96	133 107	202 160	292 228	55 49	60 53	104 88	124 103	209 169	318 252	458 359	76 67	158 131	266 215	405 321	583 457
32'	4 4	13 13	31 28	34 31	60 51	71 60	73 62	107 88	120 98	183 146	264 208	49 44	53 48	94 80	112 94	189 154	288 229	415 326	68 61	142 119	240 195	366 292	528 415
33'	3 3	11 11	28 26	30 28	54 46	64 54	66 56	97 80	109 89	166 133	240 189	43 40	48 44	84 73	101 85	171 140	261 209	376 298	61 56	128 109	217 178	332 266	479 379
34'	3 3	10 10	25 23	27 25	48 42	58 51	60 51	88 73	99 81	151 122	218 173	39 37	43 40	76 66	91 78	155 128	237 191	342 272	54 51	116 99	197 163	301 243	436 346
35'	2 2	9 9	22 22	24 23	44 39	52 46	54 47	80 67	90 75	137 111	199 159	35 34	38 37	69 61	82 72	141 117	215 175	312 249	49 47	104 91	179 149	274 223	397 317
36'	2 2	8 8	20 20	22 21	39 36	47 42	49 43	72 62	81 69	125 102	182 146	31 31	34 34	62 56	74 66	128 108	197 161	285 229	44 43	95 84	163 137	250 205	363 292
37'	1 1	7 7	18 18	20 20	36 33	43 39	44 40	66 57	74 63	114 94	166 134	28 28	31 31	56 52	67 61	117 99	180 148	261 211	39 39	77 76	148 126	229 189	332 269
38'	1 1	6 6	16 16	17 17	32 30	39 36	40 37	60 52	68 58	105 87	152 124	25 25	27 27	51 48	61 56	106 92	164 137	240 195	35 35	78 71	136 117	209 174	305 248
39'	0 0	5 5	14 14	16 16	29 28	35 33	37 34	55 48	62 54	96 81	140 115	22 22	25 25	46 44	56 52	97 85	151 127	220 180	31 31	71 66	124 108	192 161	280 229
40'	0 0	4 4	13 13	14 14	27 26	32 31	33 32	50 45	57 50	88 75	129 106	20 20	22 22	42 41	51 48	89 79	138 117	202 167	28 28	64 61	113 100	176 149	258 213

Line 1: TL deflection L/180
 Line 2: LL deflection L/240
 See PLF chart notes # 3 & 4 on p.10

Allowable Loads for KRB Glulam in PLF LDF = 1.15

Snow 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'	1501	2357	2476	3338	3615	4407	4675	5323	5878	7348	8446	11552	13769	3865	4060	5929	7666	8730	9640	12052	13852	18945	30843
	1501	2357	2476	3338	3615	4407	4675	5323	5878	7348	8446	11552	13769	3865	4060	5929	7666	8730	9640	12052	13852	18945	30843
7'	1101	1730	1817	2486	2748	3478	3671	4132	4519	5508	6215	8082	9798	2837	2980	4506	6021	6777	7411	9034	10193	13254	21947
	1101	1730	1817	2486	2748	3478	3671	4132	4519	5508	6215	8082	9798	2837	2980	4506	6021	6777	7411	9034	10193	13254	21947
8'	842	1323	1390	1902	2102	2666	2852	3291	3652	4404	4916	6214	7345	2170	2280	3447	4677	5397	5989	7223	8062	10190	16452
	775	1323	1390	1902	2102	2666	2852	3291	3652	4404	4916	6214	7345	2170	2280	3447	4677	5397	5989	7223	8062	10190	16452
9'	664	1044	1097	1501	1659	2105	2251	2598	2883	3587	4062	5046	5873	1712	1799	2721	3692	4261	4729	5882	6661	8275	13155
	545	1044	1097	1501	1659	2105	2251	2598	2883	3587	4062	5046	5873	1712	1799	2721	3692	4261	4729	5882	6661	8275	13155
10'	525	845	887	1214	1343	1703	1822	2103	2334	2903	3288	4210	4891	1385	1455	2202	2988	3448	3827	4761	5392	6905	10957
	397	824	887	1214	1343	1703	1822	2103	2334	2903	3288	4210	4891	1352	1455	2202	2988	3448	3827	4761	5392	6905	10957
11'	393	697	732	1002	1108	1406	1504	1736	1927	2397	2715	3477	4086	1143	1201	1817	2467	2847	3160	3931	4452	5703	9152
	298	619	671	1002	1108	1406	1504	1736	1927	2397	2715	3477	4086	1016	1100	1817	2467	2847	3160	3931	4452	5703	9152
12'	302	585	614	841	930	1180	1262	1457	1617	2012	2279	2920	3431	959	1008	1525	2070	2390	2653	3300	3738	4788	7685
	230	477	517	841	930	1180	1262	1457	1617	2012	2279	2920	3431	782	848	1525	2070	2390	2653	3300	3738	4788	7685
13'	236	494	523	716	791	1004	1074	1240	1377	1713	1940	2486	2921	811	857	1298	1762	2034	2258	2809	3182	4076	6543
	181	375	407	675	791	1004	1074	1240	1377	1713	1940	2486	2921	615	667	1298	1762	2034	2258	2809	3182	4076	6543
14'	188	395	428	616	681	865	925	1068	1186	1475	1671	2141	2516	647	702	1117	1517	1751	1944	2420	2741	3512	5637
	145	300	325	541	636	865	925	1068	1186	1475	1671	2141	2516	493	534	1043	1517	1751	1944	2420	2741	3512	5637
15'	152	320	347	536	592	752	805	929	1031	1284	1454	1863	2190	524	569	972	1320	1524	1692	2105	2385	3056	4906
	118	244	265	439	517	752	805	929	1031	1284	1454	1863	2190	401	434	848	1320	1524	1692	2105	2385	3056	4906
16'	125	262	285	470	520	660	706	815	905	1127	1277	1636	1923	430	467	852	1158	1337	1485	1848	2094	2683	4308
	97	201	218	362	426	626	698	815	905	1127	1277	1636	1923	330	358	698	1144	1337	1485	1848	2094	2683	4308
17'	103	218	236	395	460	584	625	721	801	997	1129	1448	1702	357	388	754	1024	1183	1313	1635	1852	2374	3812
	81	168	182	302	355	522	582	721	801	997	1129	1448	1702	275	298	582	954	1183	1313	1635	1852	2374	3812
18'	86	183	198	332	391	520	556	642	713	888	1006	1290	1516	299	325	642	912	1053	1170	1456	1650	2115	3396
	68	141	153	254	299	439	490	618	713	888	1006	1290	1516	232	251	491	804	1014	1170	1456	1650	2115	3396
19'	73	154	168	281	331	466	498	575	639	796	902	1156	1359	253	275	544	817	944	1048	1305	1479	1896	3045
	58	120	130	216	254	374	417	525	622	796	902	1156	1359	197	214	417	683	862	1020	1305	1479	1896	3045
20'	62	131	143	240	283	419	449	518	576	717	813	1042	1225	216	234	464	736	850	944	1176	1333	1709	2745
	50	103	112	185	218	320	357	451	533	717	813	1042	1225	169	183	358	586	739	875	1176	1333	1709	2745
21'	53	113	123	206	244	360	403	469	521	649	736	944	1110	185	201	399	660	770	855	1065	1207	1548	2486
	43	89	96	160	188	277	309	389	461	649	736	944	1110	146	158	309	506	638	756	1065	1207	1548	2486
22'	45	97	106	179	211	312	349	427	474	591	669	859	1010	160	173	346	572	700	777	969	1098	1408	2262
	37	77	84	139	164	241	268	338	401	571	669	859	1010	127	138	269	440	555	657	936	1098	1408	2262
23'	39	84	92	155	184	272	304	385	433	539	611	785	923	138	151	301	499	632	710	885	1003	1287	2067
	33	68	73	122	143	211	235	296	351	499	611	785	923	111	120	235	385	486	575	819	1002	1287	2067
24'	34	74	80	136	161	239	267	338	397	494	561	719	846	121	131	263	437	554	651	811	919	1180	1895
	29	60	65	107	126	185	207	261	309	439	538	719	846	98	106	207	339	428	506	721	882	1180	1895
25'	29	64	70	119	141	210	235	298	354	455	516	662	779	106	115	232	385	489	580	746	846	1085	1744
	25	53	57	95	112	164	183	231	273	389	476	662	779	87	94	183	300	378	448	638	780	1085	1744
26'	25	57	62	105	125	186	208	264	313	420	476	611	719	93	101	205	341	433	514	688	780	1002	1610
	23	47	51	84	99	146	163	205	243	346	423	611	719	77	83	163	267	336	398	567	693	1002	1610
27'	22	50	54	93	111	165	185	234	279	388	440	565	665	82	89	181	303	385	457	637	722	927	1490
	20	42	45	75	89	130	145	183	217	309	378	564	665	69	74	145	238	300	356	506	619	924	1490
28'	19	44	48	83	98	147	165	209	249	357	409	525	618	72	79	161	270	343	408	586	670	861	1383
	18	38	41	68	79	117	130	164	194	277	338	505	618	62	67	130	214	269	319	454	555	829	1383
29'	17	39	43	74	88	131	147	187	223	321	380	488	575	64	70	144	242	307	366	526	623	801	1287
	16	34	37	61	72	105	117	148	175	249	305	455	575	55	60	117	192	242	287	409	500	746	1287
30'	15	35	38	66	79	118	132	168	200	288	354	455	536	57	62	129	217	276	329	473	581	747	1201
	15	31	33	55	65	95	106	133	158	225	275	411	533	50	54	106	174	219	259	369	451	674	1195
31'	13	31	34	59	70	106	119	152	181	260	320	426	501	51	56	116	195	249	296	427	525	698	1122
	13	28	30	50	59	86	96	121	143	204	249	372	483	45	49	96	157	198	235	334	409	611	1083
32'	12	28	30	53	63	96	107	137	163	236	290	398	469	45	50	104	176	225	268	386	476	653	1051
	12	25	27	45	53	78	87	110	130	185	227	338	439	41	45	87	143	180	214	304	372	555	984
33'	10	25	27	48	57	86	97	124	148	214	263	374	440	40	44	94	159	203	243	351	432	613	986
	10	23	25	41	49	71	80	100	119	169	207	309	401	38	41	80	130	164	195	277	339	506	898
34'	9	22	24	43	52	78	88	113	134	195	240	351	414	36	40	85	144	185	221	319	393	576	927
	9	21	23	38	44	65	73	92	109	155	189	282	366	34	37	73	119	150	178				

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.