

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 = 1.25

## Construction Loads

### 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'	1095 899	1827 1827	2869 2869	3015 3015	4065 4065	4402 4402	4471 4471	5366 5366	5692 5692	7157 7157	8947 8947	4509 4509	4737 4737	6387 6387	6917 6917	8944 8944	11246 11246	14060 14060	6029 6029	8804 8804	11384 11384	14313 14313	17894 17894
7'	751 566	1341 1296	2106 2106	2213 2213	3027 3027	3346 3346	3411 3411	4235 4235	4470 4470	5502 5502	6707 6707	3310 3310	3478 3478	4757 4757	5258 5258	7024 7024	8647 8647	10540 10540	4426 4426	6692 6692	8940 8940	11005 11005	13414 13414
8'	502 379	1026 868	1611 1611	1693 1693	2316 2316	2560 2560	2610 2610	3246 3246	3472 3472	4447 4447	5363 5363	2532 2532	2660 2660	3639 3639	4022 4022	5457 5457	6988 6988	8428 8428	3386 3386	5119 5119	6945 6945	8894 8894	10726 10726
9'	351 266	808 610	1272 1267	1336 1336	1828 1828	2021 2021	2060 2060	2563 2563	2742 2742	3511 3511	4367 4367	1998 1990	2100 2100	2872 2872	3175 3175	4308 4308	5518 5518	6863 6863	2672 2672	4041 4041	5483 5483	7022 7022	8735 8735
10'	255 194	588 445	1029 923	1081 1000	1479 1479	1635 1635	1667 1667	2074 2074	2219 2219	2842 2842	3535 3535	1617 1451	1699 1572	2324 2324	2569 2569	3487 3487	4466 4466	5555 5555	2162 2001	3270 3270	4437 4437	5684 5684	7070 7070
11'	191 146	440 334	849 694	892 752	1221 1221	1350 1350	1376 1376	1712 1712	1832 1832	2347 2347	2919 2919	1334 1090	1402 1181	1919 1919	2121 2121	2879 2879	3688 3688	4588 4588	1784 1503	2700 2700	3664 3664	4693 4693	5839 5839
12'	146 112	338 257	706 534	749 579	1025 961	1133 1131	1155 1155	1437 1437	1538 1538	1970 1970	2451 2451	1109 840	1176 910	1610 1511	1780 1777	2416 2416	3096 3096	3852 3852	1497 1158	2266 2261	3075 3075	3940 3940	4902 4902
13'	114 88	265 202	554 420	600 455	872 756	964 889	983 918	1223 1223	1309 1309	1677 1677	2087 2087	870 660	943 715	1370 1188	1515 1397	2057 2057	2635 2635	3279 3279	1200 911	1928 1778	2618 2618	3354 3354	4173 4173
14'	90 71	211 162	442 337	479 365	751 605	830 712	846 735	1053 1046	1127 1127	1444 1444	1797 1797	695 529	753 573	1180 951	1304 1119	1771 1771	2270 2270	2824 2824	958 729	1660 1424	2254 2254	2889 2889	3595 3595
15'	73 58	170 132	358 274	388 296	648 492	722 579	736 597	916 851	981 949	1257 1257	1564 1564	563 430	610 466	1019 773	1135 910	1541 1491	1975 1975	2458 2458	777 593	1444 1158	1961 1897	2513 2513	3128 3128
16'	59 47	140 109	294 225	319 244	533 406	627 477	646 492	804 701	861 782	1103 1103	1373 1373	462 354	501 384	837 637	986 750	1352 1228	1733 1733	2158 2158	638 488	1255 954	1721 1563	2206 2206	2746 2746
17'	49 40	115 90	244 188	265 204	443 338	522 398	539 410	711 584	761 652	976 973	1215 1215	383 295	416 320	696 531	820 625	1196 1024	1533 1528	1909 1909	529 407	1043 795	1522 1303	1952 1945	2430 2430
18'	40 33	96 76	204 158	222 172	372 285	438 335	452 346	633 492	678 549	869 819	1082 1082	321 249	349 270	584 448	689 526	1065 863	1366 1288	1701 1701	444 343	876 670	1356 1098	1738 1639	2164 2164
19'	34 28	81 65	173 135	188 146	315 242	371 285	383 294	548 418	607 467	779 697	970 970	272 212	295 229	495 381	583 448	954 733	1224 1095	1524 1524	375 292	743 570	1215 933	1558 1393	1940 1940
20'	28 24	69 56	147 115	160 125	269 208	317 244	327 252	469 359	524 400	702 597	874 851	231 181	251 196	422 326	498 384	823 629	1103 939	1374 1337	320 250	634 488	1047 800	1404 1195	1748 1701
21'	24 21	59 48	126 100	137 108	231 179	273 211	282 218	404 310	451 346	636 516	792 735	198 157	216 170	363 282	429 332	709 543	999 811	1244 1155	274 216	546 422	902 691	1271 1032	1583 1469
22'	20 18	50 42	109 87	118 94	200 156	236 183	244 189	350 270	391 301	578 449	720 639	171 136	186 148	314 245	371 288	614 472	908 705	1132 1004	237 188	472 367	782 601	1156 898	1440 1278
23'	17 16	44 37	95 76	103 82	174 137	206 161	212 166	305 236	341 263	512 393	658 559	149 119	162 129	273 215	323 252	536 413	805 617	1034 879	206 164	411 321	682 526	1024 786	1316 1118
24'	15 14	38 32	82 67	90 72	152 120	180 141	186 146	267 208	299 232	449 346	603 492	130 105	141 114	239 189	283 222	469 364	706 543	948 773	179 145	360 283	597 463	899 691	1206 984
25'	13 12	33 28	72 59	79 64	134 106	158 125	163 129	235 184	263 205	396 306	555 435	113 93	123 101	210 167	249 196	414 322	623 481	872 684	157 128	316 250	526 410	793 612	1110 871
26'	11 11	29 25	63 53	69 57	118 95	140 111	144 115	208 163	233 182	351 272	503 387	100 83	109 89	185 149	220 175	366 286	552 427	791 608	138 114	279 222	466 364	702 544	1007 774
27'	9 9	25 23	56 47	61 51	104 84	124 99	128 102	185 146	207 163	312 243	448 346	88 74	96 80	164 133	195 156	325 256	491 382	704 543	122 102	248 199	414 325	624 486	896 691
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 35	86 77	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 = 1.25**

**Construction Loads**

**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'	1632	2562	2692	3629	3930	4791	5082	5787	6390	7988	9182	12557	14968	4202	4414	6446	8334	9490	10479	13101	15058	20594	33528
	1632	2562	2692	3629	3930	4791	5082	5787	6390	7988	9182	12557	14968	4202	4414	6446	8334	9490	10479	13101	15058	20594	33528
7'	1197	1881	1976	2703	2987	3781	3991	4493	4913	5988	6757	8786	10651	3084	3241	4899	6545	7368	8057	9821	11081	14409	23859
	1157	1881	1976	2703	2987	3781	3991	4493	4913	5988	6757	8786	10651	3084	3241	4899	6545	7368	8057	9821	11081	14409	23859
8'	916	1438	1511	2068	2285	2898	3100	3578	3970	4788	5344	6755	7985	2359	2479	3748	5085	5867	6511	7853	8764	11078	17886
	775	1438	1511	2068	2285	2898	3100	3578	3970	4788	5344	6755	7985	2359	2479	3748	5085	5867	6511	7853	8764	11078	17886
9'	721	1135	1193	1632	1804	2288	2448	2825	3135	3899	4416	5486	6385	1862	1956	2959	4014	4633	5141	6395	7242	8997	14302
	545	1131	1193	1632	1804	2288	2448	2825	3135	3899	4416	5486	6385	1855	1956	2959	4014	4633	5141	6395	7242	8997	14302
10'	525	919	965	1321	1460	1852	1981	2286	2537	3156	3574	4578	5318	1506	1583	2394	3249	3749	4161	5176	5862	7508	11912
	397	824	893	1321	1460	1852	1981	2286	2537	3156	3574	4578	5318	1352	1465	2394	3249	3749	4161	5176	5862	7508	11912
11'	393	758	797	1090	1205	1529	1636	1888	2095	2607	2952	3781	4442	1243	1306	1977	2682	3096	3436	4275	4841	6201	9951
	298	619	671	1090	1205	1529	1636	1888	2095	2607	2952	3781	4442	1016	1100	1977	2682	3096	3436	4275	4841	6201	9951
12'	302	630	668	915	1012	1283	1373	1585	1759	2188	2479	3175	3730	1034	1096	1659	2252	2599	2885	3589	4065	5207	8356
	230	477	517	858	1009	1283	1373	1585	1759	2188	2479	3175	3730	782	848	1656	2252	2599	2885	3589	4065	5207	8356
13'	236	494	536	778	861	1092	1169	1349	1497	1863	2110	2703	3176	811	879	1412	1916	2212	2455	3055	3460	4433	7115
	181	375	407	675	794	1092	1169	1349	1497	1863	2110	2703	3176	615	667	1302	1916	2212	2455	3055	3460	4433	7115
14'	188	395	428	670	741	941	1006	1162	1290	1605	1818	2329	2737	647	702	1215	1650	1905	2115	2632	2981	3819	6130
	145	300	325	541	636	934	1006	1162	1290	1605	1818	2329	2737	493	534	1043	1650	1905	2115	2632	2981	3819	6130
15'	152	320	347	579	645	818	875	1011	1122	1396	1582	2027	2382	524	569	1057	1436	1658	1840	2290	2594	3324	5335
	118	244	265	439	517	759	847	1011	1122	1396	1582	2027	2382	401	434	848	1389	1658	1840	2290	2594	3324	5335
16'	125	262	285	476	560	718	768	887	985	1226	1389	1780	2092	430	467	919	1260	1455	1615	2011	2278	2919	4685
	97	201	218	362	426	626	698	880	985	1226	1389	1780	2092	330	358	698	1144	1443	1615	2011	2278	2919	4685
17'	103	218	236	395	466	635	680	785	871	1085	1229	1575	1851	357	388	764	1115	1287	1429	1779	2015	2583	4146
	81	168	182	302	355	522	582	734	868	1085	1229	1575	1851	275	298	582	954	1203	1424	1779	2015	2583	4146
18'	86	183	198	332	391	566	605	699	776	966	1095	1403	1649	299	325	642	993	1146	1273	1585	1795	2301	3695
	68	141	153	254	299	439	490	618	732	966	1095	1403	1649	232	251	491	804	1014	1200	1585	1795	2301	3695
19'	73	154	168	281	331	490	542	626	695	866	981	1258	1479	253	275	544	889	1027	1141	1420	1609	2063	3312
	58	120	130	216	254	374	417	525	622	866	981	1258	1479	197	214	417	683	862	1020	1420	1609	2063	3312
20'	62	131	143	240	283	419	467	564	627	780	884	1134	1333	216	234	464	767	925	1028	1280	1450	1860	2986
	50	103	112	185	218	320	357	451	533	759	884	1134	1333	169	183	358	586	739	875	1245	1450	1860	2986
21'	53	113	123	206	244	360	403	509	567	707	801	1027	1208	185	201	399	660	835	931	1159	1314	1685	2705
	43	89	96	160	188	277	309	389	461	656	801	1027	1208	146	158	309	506	638	756	1076	1314	1685	2705
22'	45	97	106	179	211	312	349	442	516	643	729	935	1099	160	173	346	572	724	846	1055	1195	1533	2462
	37	77	84	139	164	241	268	338	401	571	698	935	1099	127	138	269	440	555	657	936	1144	1533	2462
23'	39	84	92	155	184	272	304	385	457	587	666	854	1004	138	151	301	499	632	750	963	1092	1400	2250
	33	68	73	122	143	211	235	296	351	499	611	854	1004	111	120	235	385	486	575	819	1002	1400	2250
24'	34	74	80	136	161	239	267	338	401	538	610	783	921	121	131	263	437	554	658	883	1001	1284	2063
	29	60	65	107	126	185	207	261	309	439	538	783	921	98	106	207	339	428	506	721	882	1284	2063
25'	29	64	70	119	141	210	235	298	354	495	562	721	848	106	115	232	385	489	580	812	921	1182	1899
	25	53	57	95	112	164	183	231	273	389	476	710	848	87	94	183	300	378	448	638	780	1164	1899
26'	25	57	62	105	125	186	208	264	313	449	518	665	783	93	101	205	341	433	514	737	850	1091	1753
	23	47	51	84	99	146	163	205	243	346	423	631	783	77	83	163	267	336	398	567	693	1035	1753
27'	22	50	54	93	111	165	185	234	279	400	480	616	725	82	89	181	303	385	457	656	787	1010	1623
	20	42	45	75	89	130	145	183	217	309	378	564	725	69	74	145	238	300	356	506	619	924	1623
28'	19	44	48	83	98	147	165	209	249	357	439	572	673	72	79	161	270	343	408	586	720	937	1507
	18	38	41	68	79	117	130	164	194	277	338	505	656	62	67	130	214	269	319	454	555	829	1469
29'	17	39	43	74	88	131	147	187	223	321	394	532	626	64	70	144	242	307	366	526	646	872	1402
	16	34	37	61	72	105	117	148	175	249	305	455	590	55	60	117	192	242	287	409	500	746	1323
30'	15	35	38	66	79	118	132	168	200	288	355	496	584	57	62	129	217	276	329	473	582	814	1308
	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	464	546	51	56	116	195	249	296	427	525	761	1223
	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	434	511	45	50	104	176	225	268	386	476	712	1145
	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	397	480	40	44	94	159	203	243	351	432	652	1075
	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	362	451	36	40	85	144	185	221	319	393	594	1011
	9	21	23	38	44	65	73	92	109	155	189	282	366	34	37	73							

# 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.