



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 3-1/2-inch Wide 30F-E/DF2 Glulam Roof Beams - Construction Load

Simple Span (LDF = 1.25), $F_{b*} = 3,000$ psi, $F_{v*} = 265$ psi ($F_{v*} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width												
	Depth		9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
8'	LL (plf)												
	TL (plf)	1941	2048	2829	3038	3807	4623	5549	6607	7829	9254	10938	
	BRG (in.)	3.4	3.6	5.0	5.4	6.7	8.2	9.8	11.6	13.8	16.3	19.3	
10'	LL (plf)	1077	1167										
	TL (plf)	1240	1308	1836	2046	2810	3359	3959	4620	5350	6162	7070	
	BRG (in.)	2.7	2.9	4.1	4.5	6.2	7.4	8.7	10.2	11.8	13.6	15.6	
12'	LL (plf)	623	675	1122	1319								
	TL (plf)	823	892	1272	1418	1973	2578	3076	3550	4061	4616	5219	
	BRG (in.)	2.2	2.4	3.4	3.8	5.2	6.8	8.2	9.4	10.8	12.2	13.8	
14'	LL (plf)	393	425	706	831	1361							
	TL (plf)	515	559	932	1039	1446	1891	2395	2881	3272	3689	4135	
	BRG (in.)	1.6	1.7	2.9	3.2	4.5	5.9	7.4	8.9	10.1	11.4	12.8	
16'	LL (plf)	263	285	473	556	912	1361						
	TL (plf)	342	371	621	731	1104	1444	1830	2261	2738	3070	3422	
	BRG (in.)	1.5	1.5	2.2	2.6	3.9	5.1	6.5	8.0	9.7	10.9	12.1	
18'	LL (plf)	185	200	332	391	640	956	1361					
	TL (plf)	238	258	433	511	841	1138	1442	1783	2144	2531	2918	
	BRG (in.)	1.5	1.5	1.8	2.1	3.4	4.6	5.8	7.1	8.6	10.1	11.6	
20'	LL (plf)	135	146	242	285	467	697	992	1361				
	TL (plf)	171	186	313	369	610	915	1165	1429	1714	2024	2358	
	BRG (in.)	1.5	1.5	1.5	1.7	2.7	4.1	5.2	6.4	7.6	9.0	10.5	
22'	LL (plf)	101	110	182	214	351	524	745	1023	1361			
	TL (plf)	127	138	233	275	455	684	953	1166	1400	1653	1926	
	BRG (in.)	1.5	1.5	1.5	1.5	2.3	3.4	4.7	5.7	6.9	8.1	9.4	
24'	LL (plf)	78	84	140	165	270	403	574	788	1048	1361		
	TL (plf)	96	104	177	209	348	524	750	969	1163	1374	1601	
	BRG (in.)	1.5	1.5	1.5	1.5	1.9	2.8	4.0	5.2	6.2	7.4	8.6	
26'	LL (plf)	61	66	110	130	212	317	452	620	825	1071		
	TL (plf)	74	80	137	162	271	409	586	808	980	1158	1350	
	BRG (in.)	1.5	1.5	1.5	1.5	1.6	2.4	3.4	4.7	5.7	6.7	7.8	
28'	LL (plf)	--	53	88	104	170	254	362	496	660	857	1090	
	TL (plf)	--	62	108	128	214	324	466	644	836	988	1152	
	BRG (in.)	--	1.5	1.5	1.5	1.5	2.1	3.0	4.1	5.3	6.2	7.2	
30'	LL (plf)	--	--	72	84	138	206	294	403	537	697	886	
	TL (plf)	--	--	86	102	172	261	376	520	696	852	993	
	BRG (in.)	--	--	1.5	1.5	1.5	1.8	2.6	3.5	4.7	5.8	6.7	
32'	LL (plf)	--	--	59	70	114	170	242	332	442	574	730	
	TL (plf)	--	--	69	82	140	213	307	425	570	741	864	
	BRG (in.)	--	--	1.5	1.5	1.5	1.6	2.3	3.1	4.1	5.4	6.2	
34'	LL (plf)	--	--	--	58	95	142	202	277	369	479	609	
	TL (plf)	--	--	--	67	114	175	253	352	472	617	758	
	BRG (in.)	--	--	--	1.5	1.5	1.5	2.0	2.8	3.7	4.8	5.8	
36'	LL (plf)	--	--	--	--	80	119	170	233	311	403	513	
	TL (plf)	--	--	--	--	94	145	211	293	395	516	661	
	BRG (in.)	--	--	--	--	1.5	1.5	1.8	2.5	3.3	4.3	5.4	
38'	LL (plf)	--	--	--	--	68	102	145	198	264	343	436	
	TL (plf)	--	--	--	--	78	121	177	247	333	436	558	
	BRG (in.)	--	--	--	--	1.5	1.5	1.6	2.2	2.9	3.8	4.9	
40'	LL (plf)	--	--	--	--	58	87	124	170	226	294	374	
	TL (plf)	--	--	--	--	65	102	149	209	282	371	475	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	2.0	2.7	3.4	4.4	
42'	LL (plf)	--	--	--	--	50	75	107	147	196	254	323	
	TL (plf)	--	--	--	--	55	86	127	178	241	317	407	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.1	4.0	
44'	LL (plf)	--	--	--	--	--	65	93	128	170	221	281	
	TL (plf)	--	--	--	--	--	73	108	153	207	273	351	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.6	2.2	2.8	3.6	
46'	LL (plf)	--	--	--	--	--	57	82	112	149	193	246	
	TL (plf)	--	--	--	--	--	62	93	131	179	236	305	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	2.0	2.6	3.3	
48'	LL (plf)	--	--	--	--	--	50	72	98	131	170	216	
	TL (plf)	--	--	--	--	--	53	80	114	155	206	265	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.0	

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/240.
4. Tabulated total load (TL) is based on the deflection criterion of span/180.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 3-1/2-inch Wide 30F-E/DF2 Glulam Roof Beams - Snow Load

Simple Span (LDF = 1.15), $F_{bK} = 3,000$ psi, $F_{vK} = 265$ psi ($F_{vK} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width												
	Depth		9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
8'	LL (plf)												
	TL (plf)	1785	1884	2602	2794	3501	4252	5104	6077	7201	8512	10061	
	BRG (in.)	3.2	3.3	4.6	4.9	6.2	7.5	9.0	10.7	12.7	15.0	17.7	
10'	LL (plf)	1077	1167										
	TL (plf)	1140	1202	1688	1881	2585	3089	3641	4249	4921	5667	6502	
	BRG (in.)	2.5	2.7	3.7	4.2	5.7	6.8	8.0	9.4	10.9	12.5	14.3	
12'	LL (plf)	623	675	1122									
	TL (plf)	789	832	1169	1303	1814	2371	2828	3264	3735	4245	4800	
	BRG (in.)	2.1	2.2	3.1	3.5	4.8	6.3	7.5	8.7	9.9	11.3	12.7	
14'	LL (plf)	393	425	706	831								
	TL (plf)	515	559	856	955	1329	1738	2202	2649	3008	3392	3802	
	BRG (in.)	1.6	1.7	2.7	3.0	4.1	5.4	6.8	8.2	9.3	10.5	11.8	
16'	LL (plf)	263	285	473	556	912							
	TL (plf)	342	371	621	729	1015	1327	1682	2079	2517	2823	3146	
	BRG (in.)	1.5	1.5	2.2	2.6	3.6	4.7	6.0	7.4	8.9	10.0	11.1	
18'	LL (plf)	185	200	332	391	640	956						
	TL (plf)	238	258	433	511	799	1046	1326	1639	1971	2327	2683	
	BRG (in.)	1.5	1.5	1.8	2.1	3.2	4.2	5.3	6.6	7.9	9.3	10.7	
20'	LL (plf)	135	146	242	285	467	697	992					
	TL (plf)	171	186	313	369	610	844	1071	1313	1576	1861	2168	
	BRG (in.)	1.5	1.5	1.5	1.7	2.7	3.8	4.8	5.9	7.0	8.3	9.6	
22'	LL (plf)	101	110	182	214	351	524	745	1023				
	TL (plf)	127	138	233	275	455	684	876	1072	1286	1519	1770	
	BRG (in.)	1.5	1.5	1.5	1.5	2.3	3.4	4.3	5.3	6.3	7.4	8.7	
24'	LL (plf)	78	84	140	165	270	403	574	788	1048			
	TL (plf)	96	104	177	209	348	524	727	890	1068	1262	1471	
	BRG (in.)	1.5	1.5	1.5	1.5	1.9	2.8	3.9	4.8	5.7	6.8	7.9	
26'	LL (plf)	61	66	110	130	212	317	452	620	825			
	TL (plf)	74	80	137	162	271	409	586	749	900	1063	1240	
	BRG (in.)	1.5	1.5	1.5	1.5	1.6	2.4	3.4	4.4	5.3	6.2	7.2	
28'	LL (plf)	--	53	88	104	170	254	362	496	660	857		
	TL (plf)	--	62	108	128	214	324	466	639	767	907	1058	
	BRG (in.)	--	1.5	1.5	1.5	1.5	2.1	3.0	4.0	4.8	5.7	6.7	
30'	LL (plf)	--	--	72	84	138	206	294	403	537	697	886	
	TL (plf)	--	--	86	102	172	261	376	520	661	782	912	
	BRG (in.)	--	--	1.5	1.5	1.5	1.8	2.6	3.5	4.5	5.3	6.2	
32'	LL (plf)	--	--	59	70	114	170	242	332	442	574	730	
	TL (plf)	--	--	69	82	140	213	307	425	570	680	793	
	BRG (in.)	--	--	1.5	1.5	1.5	1.6	2.3	3.1	4.1	4.9	5.7	
34'	LL (plf)	--	--	--	58	95	142	202	277	369	479	609	
	TL (plf)	--	--	--	67	114	175	253	352	472	596	696	
	BRG (in.)	--	--	--	1.5	1.5	1.5	2.0	2.8	3.7	4.6	5.4	
36'	LL (plf)	--	--	--	--	80	119	170	233	311	403	513	
	TL (plf)	--	--	--	--	94	145	211	293	395	516	615	
	BRG (in.)	--	--	--	--	1.5	1.5	1.8	2.5	3.3	4.3	5.0	
38'	LL (plf)	--	--	--	--	68	102	145	198	264	343	436	
	TL (plf)	--	--	--	--	78	121	177	247	333	436	546	
	BRG (in.)	--	--	--	--	1.5	1.5	1.6	2.2	2.9	3.8	4.8	
40'	LL (plf)	--	--	--	--	58	87	124	170	226	294	374	
	TL (plf)	--	--	--	--	65	102	149	209	282	371	475	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	2.0	2.7	3.4	4.4	
42'	LL (plf)	--	--	--	--	50	75	107	147	196	254	323	
	TL (plf)	--	--	--	--	55	86	127	178	241	317	407	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.1	4.0	
44'	LL (plf)	--	--	--	--	--	65	93	128	170	221	281	
	TL (plf)	--	--	--	--	--	73	108	153	207	273	351	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.6	2.2	2.8	3.6	
46'	LL (plf)	--	--	--	--	--	57	82	112	149	193	246	
	TL (plf)	--	--	--	--	--	62	93	131	179	236	305	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	2.0	2.6	3.3	
48'	LL (plf)	--	--	--	--	--	50	72	98	131	170	216	
	TL (plf)	--	--	--	--	--	53	80	114	155	206	265	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.0	

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/240.
4. Tabulated total load (TL) is based on the deflection criterion of span/180.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 3-1/2-inch Wide 30F-E/DF2 Glulam Floor Beams - Floor Load

Simple Span (LDF = 1.0), $F_{bK} = 3,000$ psi, $F_{vK} = 265$ psi ($F_{vK} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width Depth	9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
		8'	LL (plf)	1403	1520	2261	2429	3043	3696	4436	5282	6259
	TL (plf)	1552	1637	2261	2429	3043	3696	4436	5282	6259	7399	8746
	BRG (in.)	2.7	2.9	4.0	4.3	5.4	6.5	7.8	9.3	11.0	13.0	15.4
10'	LL (plf)	718	778	1292	1520	2246	2684	3164	3692	4276	4925	5651
	TL (plf)	990	1044	1467	1635	2246	2684	3164	3692	4276	4925	5651
	BRG (in.)	2.2	2.3	3.2	3.6	5.0	5.9	7.0	8.2	9.4	10.9	12.5
12'	LL (plf)	416	450	748	879	1441	1741	2060	2457	2836	3245	3689
	TL (plf)	615	667	1015	1132	1576	1876	2200	2586	2986	3419	3887
	BRG (in.)	1.6	1.8	2.7	3.0	4.2	5.5	6.5	7.5	8.6	9.8	11.1
14'	LL (plf)	262	284	471	554	907	1354	1741	2160	2613	2947	3303
	TL (plf)	384	417	696	820	1154	1510	1913	2301	2613	2947	3303
	BRG (in.)	1.5	1.5	2.2	2.6	3.6	4.7	5.9	7.1	8.1	9.1	10.2
16'	LL (plf)	175	190	315	371	608	907	1292	1772	2186	2452	2733
	TL (plf)	255	276	463	546	881	1152	1461	1805	2186	2452	2733
	BRG (in.)	1.5	1.5	1.7	2.0	3.1	4.1	5.2	6.4	7.8	8.7	9.7
18'	LL (plf)	123	133	222	261	427	637	907	1245	1657	2020	2330
	TL (plf)	177	192	322	380	628	908	1151	1423	1711	2020	2330
	BRG (in.)	1.5	1.5	1.5	1.5	2.5	3.6	4.6	5.7	6.8	8.1	9.3
20'	LL (plf)	90	97	161	190	311	465	662	907	1208	1568	1882
	TL (plf)	126	137	232	274	454	683	929	1140	1368	1615	1882
	BRG (in.)	1.5	1.5	1.5	1.5	2.1	3.1	4.2	5.1	6.1	7.2	8.4
22'	LL (plf)	67	73	121	143	234	349	497	682	907	1178	1498
	TL (plf)	93	101	172	204	338	509	730	930	1116	1318	1537
	BRG (in.)	1.5	1.5	1.5	1.5	1.7	2.5	3.6	4.6	5.5	6.5	7.5
24'	LL (plf)	52	56	93	110	180	269	383	525	699	907	1154
	TL (plf)	70	76	130	154	258	389	558	770	926	1095	1276
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	4.2	5.0	5.9	6.9
26'	LL (plf)	--	--	74	86	142	211	301	413	550	714	907
	TL (plf)	--	--	100	119	200	303	436	602	780	922	1075
	BRG (in.)	--	--	1.5	1.5	1.5	1.8	2.6	3.5	4.6	5.4	6.3
28'	LL (plf)	--	--	59	69	113	169	241	331	440	571	727
	TL (plf)	--	--	78	93	158	240	346	478	641	786	917
	BRG (in.)	--	--	1.5	1.5	1.5	1.6	2.2	3.1	4.1	5.0	5.8
30'	LL (plf)	--	--	--	56	92	138	196	269	358	465	591
	TL (plf)	--	--	--	74	126	192	278	386	517	676	790
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.9	2.7	3.5	4.6	5.4
32'	LL (plf)	--	--	--	--	76	113	161	222	295	383	487
	TL (plf)	--	--	--	--	102	156	226	315	423	553	687
	BRG (in.)	--	--	--	--	1.5	1.5	1.7	2.3	3.1	4.0	5.0
34'	LL (plf)	--	--	--	--	63	95	135	185	246	319	406
	TL (plf)	--	--	--	--	83	128	186	259	349	457	586
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	2.1	2.8	3.6	4.5
36'	LL (plf)	--	--	--	--	53	80	113	156	207	269	342
	TL (plf)	--	--	--	--	68	105	154	216	291	382	490
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.8	2.5	3.2	4.1
38'	LL (plf)	--	--	--	--	--	68	96	132	176	229	291
	TL (plf)	--	--	--	--	--	87	129	181	245	322	413
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.7	2.2	2.9	3.6
40'	LL (plf)	--	--	--	--	--	58	83	113	151	196	249
	TL (plf)	--	--	--	--	--	73	108	152	207	273	351
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	2.0	2.6	3.3
42'	LL (plf)	--	--	--	--	--	50	71	98	130	169	215
	TL (plf)	--	--	--	--	--	61	91	129	176	233	300
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.8	2.3	3.0
44'	LL (plf)	--	--	--	--	--	--	62	85	113	147	187
	TL (plf)	--	--	--	--	--	--	77	110	151	200	258
	BRG (in.)	--	--	--	--	--	--	1.5	1.5	1.6	2.1	2.7
46'	LL (plf)	--	--	--	--	--	--	54	75	99	129	164
	TL (plf)	--	--	--	--	--	--	66	94	129	172	223
	BRG (in.)	--	--	--	--	--	--	1.5	1.5	1.5	2.0	2.5
48'	LL (plf)	--	--	--	--	--	--	--	66	87	113	144
	TL (plf)	--	--	--	--	--	--	--	81	112	149	193
	BRG (in.)	--	--	--	--	--	--	--	1.5	1.5	1.8	2.3

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/360.
4. Tabulated total load (TL) is based on the deflection criterion of span/240.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 5-1/2-inch Wide 30F-E/DF2 Glulam Roof Beams - Construction Load

Simple Span (LDF = 1.25), $F_{bX} = 3,000$ psi, $F_{vX} = 265$ psi ($F_{vX} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width Depth											
		9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
8'	LL (plf)											
	TL (plf)	3051	3218	4446	4775	5982	7265	8720	10383	12302	14542	17189
	BRG (in.)	3.4	3.6	5.0	5.4	6.7	8.2	9.8	11.6	13.8	16.3	19.3
10'	LL (plf)	1693	1834									
	TL (plf)	1948	2055	2885	3215	4416	5278	6221	7260	8407	9683	11109
	BRG (in.)	2.7	2.9	4.1	4.5	6.2	7.4	8.7	10.2	11.8	13.6	15.6
12'	LL (plf)	980	1061	1762	2073							
	TL (plf)	1293	1402	1998	2228	3100	4052	4833	5578	6382	7254	8202
	BRG (in.)	2.2	2.4	3.4	3.8	5.2	6.8	8.2	9.4	10.8	12.2	13.8
14'	LL (plf)	617	668	1110	1305	2139						
	TL (plf)	810	878	1464	1632	2272	2971	3737	4527	5141	5797	6497
	BRG (in.)	1.6	1.7	2.9	3.2	4.5	5.9	7.4	8.9	10.1	11.4	12.8
16'	LL (plf)	413	448	744	874	1433	2139					
	TL (plf)	538	584	976	1149	1735	2250	2817	3444	4130	4825	5377
	BRG (in.)	1.5	1.5	2.2	2.6	3.9	5.1	6.4	7.8	9.3	10.9	12.1
18'	LL (plf)	290	314	522	614	1006	1502	2139				
	TL (plf)	374	406	681	802	1322	1752	2194	2683	3218	3800	4426
	BRG (in.)	1.5	1.5	1.8	2.1	3.4	4.5	5.6	6.8	8.2	9.6	11.2
20'	LL (plf)	212	229	381	448	734	1095	1559	2139			
	TL (plf)	269	292	492	580	959	1400	1754	2145	2573	3039	3541
	BRG (in.)	1.5	1.5	1.5	1.7	2.7	4.0	5.0	6.1	7.3	8.6	10.0
22'	LL (plf)	159	172	286	336	551	823	1171	1607			
	TL (plf)	199	216	366	432	715	1075	1431	1751	2101	2482	2892
	BRG (in.)	1.5	1.5	1.5	1.5	2.3	3.4	4.5	5.5	6.6	7.7	9.0
24'	LL (plf)	122	133	220	259	425	634	902	1238	1647		
	TL (plf)	150	164	278	329	547	823	1178	1454	1745	2062	2403
	BRG (in.)	1.5	1.5	1.5	1.5	1.9	2.8	4.0	5.0	6.0	7.0	8.2
26'	LL (plf)	96	104	173	204	334	498	710	974	1296	1682	
	TL (plf)	116	126	215	255	426	642	921	1225	1470	1737	2025
	BRG (in.)	1.5	1.5	1.5	1.5	1.6	2.4	3.4	4.6	5.5	6.4	7.5
28'	LL (plf)	77	84	139	163	267	399	568	779	1037	1347	1713
	TL (plf)	90	98	169	201	337	510	733	1011	1254	1482	1728
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	4.1	5.0	5.9	6.9
30'	LL (plf)	63	68	113	133	217	324	462	634	844	1095	1392
	TL (plf)	71	77	135	160	270	410	591	817	1081	1278	1490
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.8	2.6	3.5	4.7	5.5	6.4
32'	LL (plf)	52	56	93	109	179	267	381	522	695	902	1147
	TL (plf)	56	61	108	129	219	334	482	668	896	1112	1297
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.6	2.3	3.1	4.1	5.1	6.0
34'	LL (plf)	--	--	77	91	149	223	317	435	579	752	956
	TL (plf)	--	--	88	105	180	275	398	553	742	970	1137
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	2.0	2.8	3.7	4.8	5.6
36'	LL (plf)	--	--	65	77	126	188	267	367	488	634	806
	TL (plf)	--	--	71	86	148	228	331	461	620	812	1005
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.8	2.5	3.3	4.3	5.2
38'	LL (plf)	--	--	56	65	107	160	227	312	415	539	685
	TL (plf)	--	--	58	70	123	191	278	388	523	685	877
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.6	2.2	2.9	3.8	4.9
40'	LL (plf)	--	--	--	56	92	137	195	267	356	462	587
	TL (plf)	--	--	--	58	103	160	235	329	444	583	747
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	2.0	2.7	3.4	4.4
42'	LL (plf)	--	--	--	--	79	118	168	231	307	399	507
	TL (plf)	--	--	--	--	86	135	199	280	379	499	640
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.1	4.0
44'	LL (plf)	--	--	--	--	69	103	146	201	267	347	441
	TL (plf)	--	--	--	--	72	115	170	240	326	429	552
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.6	2.2	2.8	3.6
46'	LL (plf)	--	--	--	--	60	90	128	176	234	304	386
	TL (plf)	--	--	--	--	61	98	146	207	281	372	479
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.6	3.3
48'	LL (plf)	--	--	--	--	--	79	113	155	206	267	340
	TL (plf)	--	--	--	--	51	83	125	178	244	323	417
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.4	3.0

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/240.
4. Tabulated total load (TL) is based on the deflection criterion of span/180.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 5-1/2-inch Wide 30F-E/DF2 Glulam Roof Beams - Snow Load

Simple Span (LDF = 1.15), $F_{bK} = 3,000$ psi, $F_{vK} = 265$ psi ($F_{vK} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width												
	Depth		9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
8'	LL (plf)												
	TL (plf)	2806	2960	4089	4391	5502	6682	8020	9550	11315	13376	15811	
	BRG (in.)	3.2	3.3	4.6	4.9	6.2	7.5	9.0	10.7	12.7	15.0	17.7	
10'	LL (plf)	1693	1834										
	TL (plf)	1791	1890	2653	2957	4061	4854	5722	6677	7732	8906	10218	
	BRG (in.)	2.5	2.7	3.7	4.2	5.7	6.8	8.0	9.4	10.9	12.5	14.3	
12'	LL (plf)	980	1061	1762									
	TL (plf)	1240	1308	1837	2048	2850	3726	4445	5129	5869	6671	7543	
	BRG (in.)	2.1	2.2	3.1	3.5	4.8	6.3	7.5	8.7	9.9	11.3	12.7	
14'	LL (plf)	617	668	1110	1305								
	TL (plf)	810	878	1346	1500	2089	2731	3436	4162	4727	5330	5975	
	BRG (in.)	1.6	1.7	2.7	3.0	4.1	5.4	6.8	8.2	9.3	10.5	11.8	
16'	LL (plf)	413	448	744	874	1433							
	TL (plf)	538	584	976	1145	1595	2068	2589	3166	3797	4436	4944	
	BRG (in.)	1.5	1.5	2.2	2.6	3.6	4.7	5.9	7.1	8.6	10.0	11.1	
18'	LL (plf)	290	314	522	614	1006	1502						
	TL (plf)	374	406	681	802	1247	1610	2016	2466	2958	3493	4069	
	BRG (in.)	1.5	1.5	1.8	2.1	3.2	4.1	5.1	6.3	7.5	8.9	10.3	
20'	LL (plf)	212	229	381	448	734	1095	1559					
	TL (plf)	269	292	492	580	959	1286	1611	1971	2365	2793	3255	
	BRG (in.)	1.5	1.5	1.5	1.7	2.7	3.7	4.6	5.6	6.7	7.9	9.2	
22'	LL (plf)	159	172	286	336	551	823	1171	1607				
	TL (plf)	199	216	366	432	715	1049	1314	1608	1931	2280	2658	
	BRG (in.)	1.5	1.5	1.5	1.5	2.3	3.3	4.1	5.0	6.0	7.1	8.3	
24'	LL (plf)	122	133	220	259	425	634	902	1238				
	TL (plf)	150	164	278	329	547	823	1091	1335	1603	1894	2208	
	BRG (in.)	1.5	1.5	1.5	1.5	1.9	2.8	3.7	4.6	5.5	6.5	7.5	
26'	LL (plf)	96	104	173	204	334	498	710	974	1296			
	TL (plf)	116	126	215	255	426	642	918	1124	1350	1596	1861	
	BRG (in.)	1.5	1.5	1.5	1.5	1.6	2.4	3.4	4.2	5.0	5.9	6.9	
28'	LL (plf)	77	84	139	163	267	399	568	779	1037	1347		
	TL (plf)	90	98	169	201	337	510	733	958	1151	1361	1587	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	3.9	4.6	5.5	6.4	
30'	LL (plf)	63	68	113	133	217	324	462	634	844	1095		
	TL (plf)	71	77	135	160	270	410	591	817	992	1173	1368	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.8	2.6	3.5	4.3	5.1	5.9	
32'	LL (plf)	52	56	93	109	179	267	381	522	695	902	1147	
	TL (plf)	56	61	108	129	219	334	482	668	862	1020	1190	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.6	2.3	3.1	4.0	4.7	5.5	
34'	LL (plf)	--	--	77	91	149	223	317	435	579	752	956	
	TL (plf)	--	--	88	105	180	275	398	553	742	894	1044	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	2.0	2.8	3.7	4.4	5.1	
36'	LL (plf)	--	--	65	77	126	188	267	367	488	634	806	
	TL (plf)	--	--	71	86	148	228	331	461	620	789	921	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.8	2.5	3.3	4.1	4.8	
38'	LL (plf)	--	--	56	65	107	160	227	312	415	539	685	
	TL (plf)	--	--	58	70	123	191	278	388	523	685	819	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.6	2.2	2.9	3.8	4.5	
40'	LL (plf)	--	--	--	56	92	137	195	267	356	462	587	
	TL (plf)	--	--	--	58	103	160	235	329	444	583	731	
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	2.0	2.7	3.4	4.3	
42'	LL (plf)	--	--	--	--	79	118	168	231	307	399	507	
	TL (plf)	--	--	--	--	86	135	199	280	379	499	640	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.1	4.0	
44'	LL (plf)	--	--	--	--	69	103	146	201	267	347	441	
	TL (plf)	--	--	--	--	72	115	170	240	326	429	552	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.6	2.2	2.8	3.6	
46'	LL (plf)	--	--	--	--	60	90	128	176	234	304	386	
	TL (plf)	--	--	--	--	61	98	146	207	281	372	479	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.6	3.3	
48'	LL (plf)	--	--	--	--	--	79	113	155	206	267	340	
	TL (plf)	--	--	--	--	--	83	125	178	244	323	417	
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.8	2.4	3.0	

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/360.
4. Tabulated total load (TL) is based on the deflection criterion of span/240.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 5-1/2-inch Wide 30F-E/DF2 Glulam Floor Beams - Floor Load

Simple Span (LDF = 1.0), $F_{bx} = 3,000$ psi, $F_{vx} = 265$ psi ($F_{vx} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width Depth	9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
		8'	LL (plf)	2204	2388							
	TL (plf)	2438	2572	3554	3816	4782	5808	6971	8301	9835	11627	13744
	BRG (in.)	2.7	2.9	4.0	4.3	5.4	6.5	7.8	9.3	11.0	13.0	15.4
10'	LL (plf)	1129	1223	2030	2388							
	TL (plf)	1556	1641	2305	2569	3529	4218	4972	5802	6720	7740	8880
	BRG (in.)	2.2	2.3	3.2	3.6	5.0	5.9	7.0	8.2	9.4	10.9	12.5
12'	LL (plf)	653	707	1175	1382	2264						
	TL (plf)	967	1048	1596	1779	2476	3237	3862	4457	5100	5797	6554
	BRG (in.)	1.6	1.8	2.7	3.0	4.2	5.5	6.5	7.5	8.6	9.8	11.1
14'	LL (plf)	411	446	740	870	1426	2128					
	TL (plf)	604	655	1094	1289	1814	2372	2984	3616	4107	4631	5191
	BRG (in.)	1.5	1.5	2.2	2.6	3.6	4.7	5.9	7.1	8.1	9.1	10.2
16'	LL (plf)	276	298	496	583	955	1426	2030				
	TL (plf)	400	434	728	858	1384	1795	2248	2749	3298	3853	4295
	BRG (in.)	1.5	1.5	1.7	2.0	3.1	4.1	5.1	6.2	7.4	8.7	9.7
18'	LL (plf)	194	210	348	409	671	1001	1426	1956			
	TL (plf)	277	301	507	598	987	1397	1750	2141	2569	3033	3534
	BRG (in.)	1.5	1.5	1.5	1.5	2.5	3.6	4.5	5.5	6.5	7.7	9.0
20'	LL (plf)	141	153	254	298	489	730	1040	1426	1898		
	TL (plf)	199	216	365	431	714	1073	1398	1710	2053	2424	2825
	BRG (in.)	1.5	1.5	1.5	1.5	2.1	3.1	4.0	4.9	5.8	6.9	8.0
22'	LL (plf)	106	115	191	224	367	549	781	1071	1426	1851	
	TL (plf)	146	159	270	320	532	800	1140	1395	1675	1979	2306
	BRG (in.)	1.5	1.5	1.5	1.5	1.7	2.5	3.6	4.4	5.2	6.2	7.2
24'	LL (plf)	82	88	147	173	283	422	602	825	1098	1426	1813
	TL (plf)	110	119	205	243	405	611	877	1157	1390	1643	1915
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	4.0	4.8	5.6	6.5
26'	LL (plf)	64	70	116	136	223	332	473	649	864	1122	1426
	TL (plf)	83	91	158	187	314	476	685	946	1170	1383	1613
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.8	2.6	3.5	4.4	5.2	6.0
28'	LL (plf)	51	56	92	109	178	266	379	520	692	898	1142
	TL (plf)	64	70	123	147	248	377	543	752	997	1179	1375
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.6	2.2	3.1	4.0	4.7	5.5
30'	LL (plf)	--	--	75	88	145	216	308	422	562	730	928
	TL (plf)	--	--	97	116	198	302	437	606	813	1016	1185
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.9	2.7	3.5	4.4	5.1
32'	LL (plf)	--	--	62	73	119	178	254	348	463	602	765
	TL (plf)	--	--	77	93	160	245	356	494	664	869	1030
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.7	2.3	3.1	4.0	4.8
34'	LL (plf)	--	--	52	61	100	149	212	290	386	502	638
	TL (plf)	--	--	62	75	130	201	292	407	549	719	903
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.5	2.1	2.8	3.6	4.5
36'	LL (plf)	--	--	--	51	84	125	178	245	325	422	537
	TL (plf)	--	--	--	60	106	165	242	339	457	600	770
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	1.8	2.5	3.2	4.1
38'	LL (plf)	--	--	--	--	71	106	152	208	277	359	457
	TL (plf)	--	--	--	--	87	137	202	284	384	505	649
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.7	2.2	2.9	3.6
40'	LL (plf)	--	--	--	--	61	91	130	178	237	308	392
	TL (plf)	--	--	--	--	72	115	170	239	325	429	551
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.6	3.3
42'	LL (plf)	--	--	--	--	53	79	112	154	205	266	338
	TL (plf)	--	--	--	--	60	96	143	203	277	366	471
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.3	3.0
44'	LL (plf)	--	--	--	--	--	69	98	134	178	231	294
	TL (plf)	--	--	--	--	--	81	121	173	237	314	405
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.6	2.1	2.7
46'	LL (plf)	--	--	--	--	--	60	85	117	156	203	257
	TL (plf)	--	--	--	--	--	68	103	148	203	270	350
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.5
48'	LL (plf)	--	--	--	--	--	53	75	103	137	178	227
	TL (plf)	--	--	--	--	--	57	88	127	175	234	304
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.3

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/360.
4. Tabulated total load (TL) is based on the deflection criterion of span/240.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 7-inch Wide 30F-E/DF2 Glulam Roof Beams - Construction Load

Simple Span (LDF = 1.25), $F_{b*} = 3,000$ psi, $F_{v*} = 265$ psi ($F_{v*} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width Depth	9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
		8'	LL (plf) TL (plf) BRG (in.)	3883 3.4	4096 3.6	5659 5.0	6077 5.4	7613 6.7	9247 8.2	11098 9.8	13215 11.6	15657 13.8
10'	LL (plf) TL (plf) BRG (in.)	2155 2479 2.7	2334 2615 2.9	3671 4.1	4092 4.5	5621 6.2	6717 7.4	7918 8.7	9240 10.2	10700 11.8	12324 13.6	14139 15.6
12'	LL (plf) TL (plf) BRG (in.)	1247 1646 2.2	1351 1784 2.4	2243 2544 3.4	2638 2835 3.8	3945 5.2	5136 6.8	6151 8.2	7099 9.4	8123 10.8	9232 12.2	10439 13.8
14'	LL (plf) TL (plf) BRG (in.)	785 1030 1.6	851 1117 1.7	1413 1863 2.9	1661 2077 3.2	2722 2874 4.5	3708 5.7	4641 7.2	5674 8.8	6543 10.1	7377 11.4	8269 12.8
16'	LL (plf) TL (plf) BRG (in.)	526 685 1.5	570 743 1.5	946 1242 2.2	1113 1463 2.6	1824 2165 3.9	2722 2794 5.0	3499 6.2	4278 7.6	5130 9.1	6056 10.7	6844 12.1
18'	LL (plf) TL (plf) BRG (in.)	369 476 1.5	400 517 1.5	665 866 1.8	782 1021 2.1	1281 1683 3.4	1912 2176 4.4	2722 2725 5.5	3333 6.7	3998 8.0	4720 9.4	5498 11.0
20'	LL (plf) TL (plf) BRG (in.)	269 343 1.5	292 372 1.5	484 626 1.5	570 739 1.7	934 1220 2.7	1394 1738 3.9	1985 2178 4.9	2664 5.9	3196 7.1	3774 8.4	4398 9.8
22'	LL (plf) TL (plf) BRG (in.)	202 253 1.5	219 275 1.5	364 465 1.5	428 550 1.5	702 911 2.3	1047 1368 3.4	1491 1777 4.4	2045 2174 5.3	2609 6.4	3082 7.6	3592 8.8
24'	LL (plf) TL (plf) BRG (in.)	156 191 1.5	169 208 1.5	280 354 1.5	330 419 1.5	540 696 1.9	807 1047 2.8	1148 1475 4.0	1575 1805 4.9	2097 2167 5.8	2560 6.9	2984 8.0
26'	LL (plf) TL (plf) BRG (in.)	123 147 1.5	133 160 1.5	221 274 1.5	259 325 1.5	425 542 1.6	634 817 2.4	903 1172 3.4	1239 1520 4.4	1649 1826 5.3	2141 2158 6.3	2515 7.3
28'	LL (plf) TL (plf) BRG (in.)	98 114 1.5	106 125 1.5	177 215 1.5	208 256 1.5	340 429 1.5	508 649 2.1	723 932 3.0	992 1287 4.1	1320 1557 4.9	1714 1840 5.8	2146 6.7
30'	LL (plf) TL (plf) BRG (in.)	80 90 1.5	86 98 1.5	144 171 1.5	169 204 1.5	277 344 1.5	413 522 1.8	588 752 2.6	807 1040 3.5	1074 1342 4.6	1394 1586 5.4	1772 1850 6.3
32'	LL (plf) TL (plf) BRG (in.)	66 71 1.5	71 78 1.5	118 138 1.5	139 164 1.5	228 279 1.5	340 425 1.6	484 614 2.3	665 851 3.1	885 1140 4.1	1148 1380 5.0	1460 1610 5.8
34'	LL (plf) TL (plf) BRG (in.)	55 57 1.5	59 62 1.5	99 112 1.5	116 134 1.5	190 229 1.5	284 350 1.5	404 507 2.0	554 703 2.8	737 944 3.7	957 1210 4.7	1217 1412 5.4
36'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	83 91 1.5	98 109 1.5	160 189 1.5	239 290 1.5	340 422 1.8	467 587 2.5	621 789 3.3	807 1033 4.3	1026 1247 5.1
38'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	71 74 1.5	83 90 1.5	136 157 1.5	203 243 1.5	289 354 1.6	397 494 2.2	528 665 2.9	686 872 3.8	872 1108 4.8
40'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	61 61 1.5	71 74 1.5	117 131 1.5	174 204 1.5	248 299 1.5	340 418 2.0	453 565 2.7	588 741 3.4	748 951 4.4
42'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	-- -- --	61 -- 1.5	110 172 1.5	150 172 1.5	214 254 1.5	294 356 1.8	391 483 2.4	508 635 3.1	646 815 4.0
44'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	-- -- --	-- 50 1.5	88 92 1.5	131 146 1.5	186 217 1.5	256 305 1.6	340 415 2.2	442 546 2.8	562 703 3.6
46'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	-- -- --	-- -- --	77 77 1.5	115 124 1.5	163 186 1.5	224 263 1.5	298 358 2.0	387 473 2.6	492 609 3.3
48'	LL (plf) TL (plf) BRG (in.)	-- -- --	-- -- --	-- -- --	-- -- --	-- 65 1.5	101 106 1.5	144 159 1.5	197 227 1.5	262 310 1.8	340 411 2.4	433 531 3.0

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/240.
4. Tabulated total load (TL) is based on the deflection criterion of span/180.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 7-inch Wide 30F-E/DF2 Glulam Roof Beams - Snow Load

Simple Span (LDF = 1.15), $F_{bK} = 3,000$ psi, $F_{vK} = 265$ psi ($F_{vK} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width												
	Depth		9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
8'	LL (plf)												
	TL (plf)	3571	3767	5204	5589	7002	8505	10208	12155	14401	17023	20123	
	BRG (in.)	3.2	3.3	4.6	4.9	6.2	7.5	9.0	10.7	12.7	15.0	17.7	
10'	LL (plf)	2155	2334										
	TL (plf)	2280	2405	3376	3763	5169	6177	7282	8498	9841	11335	13004	
	BRG (in.)	2.5	2.7	3.7	4.2	5.7	6.8	8.0	9.4	10.9	12.5	14.3	
12'	LL (plf)	1247	1351	2243									
	TL (plf)	1578	1665	2338	2607	3627	4723	5657	6528	7470	8490	9600	
	BRG (in.)	2.1	2.2	3.1	3.5	4.8	6.3	7.5	8.7	9.9	11.3	12.7	
14'	LL (plf)	785	851	1413	1661								
	TL (plf)	1030	1117	1713	1910	2642	3409	4268	5217	6017	6784	7604	
	BRG (in.)	1.6	1.7	2.7	3.0	4.1	5.3	6.6	8.1	9.3	10.5	11.8	
16'	LL (plf)	526	570	946	1113	1824							
	TL (plf)	685	743	1242	1453	1990	2568	3216	3933	4717	5568	6293	
	BRG (in.)	1.5	1.5	2.2	2.6	3.5	4.6	5.7	7.0	8.4	9.9	11.1	
18'	LL (plf)	369	400	665	782	1281	1912						
	TL (plf)	476	517	866	1021	1549	1999	2504	3063	3675	4339	5055	
	BRG (in.)	1.5	1.5	1.8	2.1	3.1	4.0	5.0	6.1	7.3	8.7	10.1	
20'	LL (plf)	269	292	484	570	934	1394	1985					
	TL (plf)	343	372	626	739	1220	1597	2001	2448	2938	3469	4042	
	BRG (in.)	1.5	1.5	1.5	1.7	2.7	3.6	4.5	5.5	6.5	7.7	9.0	
22'	LL (plf)	202	219	364	428	702	1047	1491					
	TL (plf)	253	275	465	550	911	1302	1632	1998	2398	2832	3301	
	BRG (in.)	1.5	1.5	1.5	1.5	2.3	3.2	4.0	4.9	5.9	6.9	8.1	
24'	LL (plf)	156	169	280	330	540	807	1148	1575				
	TL (plf)	191	208	354	419	696	1047	1354	1658	1991	2352	2742	
	BRG (in.)	1.5	1.5	1.5	1.5	1.9	2.8	3.7	4.5	5.4	6.3	7.4	
26'	LL (plf)	123	133	221	259	425	634	903	1239	1649			
	TL (plf)	147	160	274	325	542	817	1140	1396	1677	1982	2310	
	BRG (in.)	1.5	1.5	1.5	1.5	1.6	2.4	3.3	4.1	4.9	5.8	6.7	
28'	LL (plf)	98	106	177	208	340	508	723	992	1320			
	TL (plf)	114	125	215	256	429	649	932	1190	1429	1690	1971	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	3.8	4.5	5.3	6.2	
30'	LL (plf)	80	86	144	169	277	413	588	807	1074	1394		
	TL (plf)	90	98	171	204	344	522	752	1024	1231	1456	1699	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.8	2.6	3.5	4.2	4.9	5.8	
32'	LL (plf)	66	71	118	139	228	340	484	665	885	1148	1460	
	TL (plf)	71	78	138	164	279	425	614	851	1070	1266	1478	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.6	2.3	3.1	3.9	4.6	5.4	
34'	LL (plf)	55	59	99	116	190	284	404	554	737	957	1217	
	TL (plf)	57	62	112	134	229	350	507	703	938	1110	1295	
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.5	2.0	2.8	3.6	4.3	5.0	
36'	LL (plf)	--	--	83	98	160	239	340	467	621	807	1026	
	TL (plf)	--	--	91	109	189	290	422	587	789	979	1144	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.8	2.5	3.3	4.0	4.7	
38'	LL (plf)	--	--	71	83	136	203	289	397	528	686	872	
	TL (plf)	--	--	74	90	157	243	354	494	665	870	1016	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.6	2.2	2.9	3.8	4.4	
40'	LL (plf)	--	--	61	71	117	174	248	340	453	588	748	
	TL (plf)	--	--	61	74	131	204	299	418	565	741	908	
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.5	2.0	2.7	3.4	4.2	
42'	LL (plf)	--	--	--	--	101	150	214	294	391	508	646	
	TL (plf)	--	--	--	61	110	172	254	356	483	635	815	
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	1.8	2.4	3.1	4.0	
44'	LL (plf)	--	--	--	--	88	131	186	256	340	442	562	
	TL (plf)	--	--	--	50	92	146	217	305	415	546	703	
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	1.6	2.2	2.8	3.6	
46'	LL (plf)	--	--	--	--	77	115	163	224	298	387	492	
	TL (plf)	--	--	--	--	77	124	186	263	358	473	609	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.6	3.3	
48'	LL (plf)	--	--	--	--	--	101	144	197	262	340	433	
	TL (plf)	--	--	--	--	65	106	159	227	310	411	531	
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.4	3.0	

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/360.
4. Tabulated total load (TL) is based on the deflection criterion of span/240.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.



ROSBORO BIG BEAM DF™

HIGH PERFORMANCE | 3,000fb | 2.2 E (TRUE)

Allowable Load for 7-inch Wide 30F-E/DF2 Glulam Floor Beams - Floor Load

Simple Span (LDF = 1.0), $F_{bx} = 3,000$ psi, $F_{vx} = 265$ psi ($F_{vx} = 255$ psi for 9-1/4" beam depth), $E_x = 2.1 \times 10^6$ psi

Span	Width Depth	9 1/4"	9 1/2"	11 1/4"	11 7/8"	14"	16"	18"	20"	22"	24"	26"
		8'	LL (plf)	2805	3039	4523	4857	6086	7392	8872	10565	12518
	TL (plf)	3103	3274	4523	4857	6086	7392	8872	10565	12518	14797	17492
	BRG (in.)	2.7	2.9	4.0	4.3	5.4	6.5	7.8	9.3	11.0	13.0	15.4
10'	LL (plf)	1436	1556	2584	3039	4492	5368	6328	7385	8553	9851	11302
	TL (plf)	1980	2089	2933	3269	4492	5368	6328	7385	8553	9851	11302
	BRG (in.)	2.2	2.3	3.2	3.6	5.0	5.9	7.0	8.2	9.4	10.9	12.5
12'	LL (plf)	831	900	1495	1759	2882	3151	4103	4915	5672	6491	7377
	TL (plf)	1230	1334	2031	2264	3151	3151	4103	4915	5672	6491	7377
	BRG (in.)	1.6	1.8	2.7	3.0	4.2	5.4	6.5	7.5	8.6	9.8	11.1
14'	LL (plf)	523	567	942	1108	1815	2709	3707	4532	5227	5893	6606
	TL (plf)	769	834	1393	1640	2294	2961	3707	4532	5227	5893	6606
	BRG (in.)	1.5	1.5	2.2	2.6	3.6	4.6	5.8	7.0	8.1	9.1	10.2
16'	LL (plf)	351	380	631	742	1216	1815	2584	3415	4096	4836	5466
	TL (plf)	510	553	926	1092	1727	2230	2793	3415	4096	4836	5466
	BRG (in.)	1.5	1.5	1.7	2.0	3.1	4.0	5.0	6.1	7.3	8.6	9.7
18'	LL (plf)	246	267	443	521	854	1275	1815	2489	3190	3767	4389
	TL (plf)	353	383	645	761	1256	1735	2174	2659	3190	3767	4389
	BRG (in.)	1.5	1.5	1.5	1.5	2.5	3.5	4.4	5.3	6.4	7.5	8.8
20'	LL (plf)	180	194	323	380	622	929	1323	1815	2416	3011	3509
	TL (plf)	253	275	465	549	909	1365	1736	2124	2549	3011	3509
	BRG (in.)	1.5	1.5	1.5	1.5	2.1	3.1	3.9	4.7	5.7	6.7	7.8
22'	LL (plf)	135	146	243	285	468	698	994	1363	1815	2356	2864
	TL (plf)	186	202	344	407	677	1019	1415	1732	2080	2457	2864
	BRG (in.)	1.5	1.5	1.5	1.5	1.7	2.5	3.5	4.3	5.1	6.0	7.0
24'	LL (plf)	104	113	187	220	360	538	766	1050	1398	1815	2307
	TL (plf)	139	152	260	309	516	778	1117	1437	1726	2040	2378
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	2.1	3.0	3.9	4.7	5.5	6.4
26'	LL (plf)	82	89	147	173	283	423	602	826	1099	1427	1815
	TL (plf)	106	116	201	238	400	606	871	1204	1453	1718	2003
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.8	2.6	3.5	4.3	5.0	5.9
28'	LL (plf)	65	71	118	138	227	339	482	661	880	1143	1453
	TL (plf)	82	89	157	187	315	480	691	957	1238	1464	1708
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.6	2.2	3.1	3.9	4.6	5.4
30'	LL (plf)	53	58	96	113	184	275	392	538	716	929	1181
	TL (plf)	63	70	124	148	252	385	556	771	1035	1261	1471
	BRG (in.)	1.5	1.5	1.5	1.5	1.5	1.5	1.9	2.7	3.5	4.3	5.0
32'	LL (plf)	--	--	79	93	152	227	323	443	590	766	973
	TL (plf)	--	--	98	118	203	312	453	629	846	1095	1279
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.7	2.3	3.1	4.0	4.7
34'	LL (plf)	--	--	66	77	127	189	269	369	492	638	812
	TL (plf)	--	--	79	95	165	255	372	519	698	915	1120
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.5	2.1	2.8	3.6	4.4
36'	LL (plf)	--	--	55	65	107	159	227	311	414	538	684
	TL (plf)	--	--	63	77	135	211	308	431	582	764	979
	BRG (in.)	--	--	1.5	1.5	1.5	1.5	1.5	1.8	2.5	3.2	4.1
38'	LL (plf)	--	--	--	55	91	135	193	265	352	457	581
	TL (plf)	--	--	--	62	111	175	257	361	489	643	826
	BRG (in.)	--	--	--	1.5	1.5	1.5	1.5	1.7	2.2	2.9	3.6
40'	LL (plf)	--	--	--	--	78	116	165	227	302	392	498
	TL (plf)	--	--	--	--	92	146	216	305	414	545	701
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	2.0	2.6	3.3
42'	LL (plf)	--	--	--	--	67	100	143	196	261	339	431
	TL (plf)	--	--	--	--	76	122	182	258	352	465	600
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.3	3.0
44'	LL (plf)	--	--	--	--	58	87	124	170	227	295	374
	TL (plf)	--	--	--	--	63	103	154	220	301	399	516
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.6	2.1	2.7
46'	LL (plf)	--	--	--	--	51	76	109	149	199	258	328
	TL (plf)	--	--	--	--	52	86	131	188	259	344	445
	BRG (in.)	--	--	--	--	1.5	1.5	1.5	1.5	1.5	2.0	2.5
48'	LL (plf)	--	--	--	--	--	67	96	131	175	227	288
	TL (plf)	--	--	--	--	--	72	112	161	223	298	387
	BRG (in.)	--	--	--	--	--	1.5	1.5	1.5	1.5	1.8	2.3

Notes:

1. Applicable to simply-supported beam with sufficient bracing to avoid lateral buckling ($C_L = 1.0$).
2. Applicable to dry-use service conditions ($C_M = 1.0$).
3. Tabulated live load (LL) is based on the deflection criterion of span/360.
4. Tabulated total load (TL) is based on the deflection criterion of span/240.
5. Tabulated total load (TL) is in addition to beam weight (assumed 36.5 pcf).
6. Selected beam size shall satisfy both live load and total load.
7. "--" indicates the allowable load is smaller than 50 plf.
8. Blank live load indicates the live load does not control.
9. Bearing "BRG" is in inches and is calculated based on the total load including the beam weight.