



**Rosboro**  
**TREATED X BEAM**  
 When You Need It To Last

Allowable Load (plf) for 3-1/2-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)										
		6	7 1/2	9	9 1/2	10 1/2	11 7/8	12	13 1/2	14	15	16
6	Simple	1068	1671	2407	2683	3278	4190	4256	5108	5418	6082	6813
	Multiple	822	1286	1854	2066	2525	3049	3093	3646	3842	4254	4694
	Min. Bearing	1.5 / 3.0	2.2 / 4.2	3.2 / 6.1	3.5 / 6.8	4.3 / 8.3	5.5 / 10.1	5.6 / 10.2	6.7 / 12.0	7.1 / 12.7	8.0 / 14.0	9.0 / 15.5
8	Simple	599	937	1351	1505	1840	2355	2405	3045	3275	3761	4253
	Multiple	460	721	1039	1159	1416	1813	1851	2345	2522	2832	3089
	Min. Bearing	1.5 / 3.0	1.6 / 3.2	2.4 / 4.6	2.6 / 5.1	3.2 / 6.2	4.1 / 8.0	4.2 / 8.1	5.4 / 10.3	5.8 / 11.1	6.6 / 12.4	7.5 / 13.6
10	Simple	331	597	862	961	1174	1503	1535	1945	2092	2402	2734
	Multiple	293	459	663	739	903	1157	1181	1496	1610	1849	2104
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.9 / 3.6	2.1 / 4.1	2.6 / 5.0	3.3 / 6.4	3.4 / 6.5	4.3 / 8.2	4.6 / 8.8	5.3 / 10.2	6.0 / 11.6
12	Simple	189	373	596	665	813	1041	1063	1347	1449	1664	1895
	Multiple	202	317	458	510	625	800	817	1036	1114	1280	1457
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.0	1.8 / 3.4	2.1 / 4.1	2.7 / 5.3	2.8 / 5.4	3.6 / 6.8	3.8 / 7.3	4.4 / 8.4	5.0 / 9.6
14	Simple	117	233	406	478	595	762	778	987	1061	1219	1388
	Multiple	147	231	334	373	456	585	598	758	815	937	1067
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.8 / 3.5	2.3 / 4.5	2.4 / 4.6	3.0 / 5.8	3.3 / 6.3	3.8 / 7.2	4.3 / 8.2
16	Simple	77	154	269	318	431	581	594	753	810	931	1060
	Multiple	103	175	254	284	347	446	455	578	622	714	814
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	2.0 / 3.9	2.1 / 4.0	2.6 / 5.1	2.8 / 5.5	3.3 / 6.3	3.7 / 7.2
18	Simple	53	106	187	221	300	437	451	592	637	733	834
	Multiple	71	137	199	222	273	350	358	454	489	562	640
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.5	1.8 / 3.5	2.3 / 4.5	2.5 / 4.8	2.9 / 5.6	3.3 / 6.3
20	Simple	--	76	134	159	216	316	326	467	514	591	673
	Multiple	--	102	160	179	219	282	288	365	393	453	516
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	2.1 / 4.0	2.3 / 4.3	2.6 / 5.0	3.0 / 5.7
22	Simple	--	55	99	117	160	235	242	348	389	480	554
	Multiple	--	75	131	146	180	231	236	300	323	372	424
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.6	1.9 / 3.9	2.3 / 4.5	2.7 / 5.1
24	Simple	--	--	74	88	121	178	184	265	297	367	447
	Multiple	--	--	100	119	149	192	197	250	270	310	354
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.6	1.9 / 4.1	2.4 / 4.7
26	Simple	--	--	57	68	94	138	143	206	231	286	349
	Multiple	--	--	77	92	126	162	166	212	228	263	300
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.8	2.0 / 4.3
28	Simple	--	--	--	53	73	109	112	163	183	226	277
	Multiple	--	--	--	72	99	139	142	181	195	225	257
	Min. Bearing	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.7 / 3.9
30	Simple	--	--	--	--	58	86	89	130	146	182	222
	Multiple	--	--	--	--	79	117	121	156	168	194	222
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.7
32	Simple	--	--	--	--	46	69	72	105	118	147	181
	Multiple	--	--	--	--	63	94	98	136	146	169	193
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4
34	Simple	--	--	--	--	--	56	58	86	97	121	148
	Multiple	--	--	--	--	--	77	80	117	128	148	170
	Min. Bearing	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2
36	Simple	--	--	--	--	--	46	47	71	80	100	123
	Multiple	--	--	--	--	--	63	66	96	108	131	150
	Min. Bearing	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
38	Simple	--	--	--	--	--	--	--	58	66	83	103
	Multiple	--	--	--	--	--	--	--	80	90	113	133
	Min. Bearing	--	--	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
40	Simple	--	--	--	--	--	--	--	48	55	69	86
	Multiple	--	--	--	--	--	--	--	67	76	95	117
	Min. Bearing	--	--	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0

**DESIGN ASSUMPTIONS:**

- SPAN is the on-center distance between supports and is valid for simple span applications.
- Dry-use conditions.
- Total load deflection limit = Span/180.
- Live load ≤ 0.75 x Total load
- Full lateral support on the compression side.
- The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



Allowable Load (plf) for 3-1/2-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)									
		16 1/2	18	19 1/2	21	22 1/2	24	25 1/2	27	28 1/2	30
6	Simple	7206	8518	10068	11928	14203	17046	19365	21712	24193	26808
	Multiple	4926	5673	6509	7449	8514	9732	11137	12777	14715	17040
	Min. Bearing	9.5 / 16.2	11.2 / 18.7	13.3 / 21.5	15.7 / 24.6	18.7 / 28.1	22.5 / 32.1	25.5 / 36.7	28.6 / 42.1	31.9 / 48.5	35.4 / 56.2
8	Simple	4456	5104	5822	6619	7510	8513	9649	10948	12447	14196
	Multiple	3223	3642	4092	4577	5101	5668	6285	6959	7696	8507
	Min. Bearing	7.8 / 14.2	9.0 / 16.0	10.2 / 18.0	11.6 / 20.1	13.2 / 22.4	15.0 / 24.9	17.0 / 27.6	19.2 / 30.6	21.9 / 33.8	25.0 / 37.4
10	Simple	2908	3462	4065	4577	5101	5668	6285	6959	7696	8507
	Multiple	2238	2665	2981	3301	3638	3995	4374	4777	5206	5663
	Min. Bearing	6.4 / 12.3	7.6 / 14.6	8.9 / 16.4	10.1 / 18.1	11.2 / 20.0	12.5 / 22.0	13.8 / 24.0	15.3 / 26.2	16.9 / 28.6	18.7 / 31.1
12	Simple	2015	2400	2818	3269	3754	4246	4658	5097	5566	6069
	Multiple	1550	1846	2168	2516	2825	3082	3352	3634	3930	4241
	Min. Bearing	5.3 / 10.2	6.3 / 12.2	7.4 / 14.3	8.6 / 16.6	9.9 / 18.6	11.2 / 20.3	12.3 / 22.1	13.4 / 24.0	14.7 / 25.9	16.0 / 28.0
14	Simple	1477	1759	2066	2397	2753	3134	3539	3960	4358	4715
	Multiple	1135	1352	1589	1844	2118	2411	2715	2931	3155	3388
	Min. Bearing	4.5 / 8.7	5.4 / 10.4	6.4 / 12.2	7.4 / 14.2	8.5 / 16.3	9.6 / 18.5	10.9 / 20.9	12.2 / 22.5	13.4 / 24.3	14.5 / 26.1
16	Simple	1127	1343	1578	1831	2103	2385	2677	2986	3310	3650
	Multiple	866	1032	1212	1407	1617	1841	2080	2333	2601	2819
	Min. Bearing	4.0 / 7.6	4.7 / 9.1	5.5 / 10.7	6.4 / 12.4	7.4 / 14.2	8.4 / 16.2	9.4 / 18.3	10.5 / 20.5	11.6 / 22.9	12.8 / 24.8
18	Simple	888	1058	1243	1440	1642	1858	2086	2326	2579	2845
	Multiple	681	812	954	1108	1274	1450	1639	1839	2050	2273
	Min. Bearing	3.5 / 6.7	4.2 / 8.0	4.9 / 9.4	5.7 / 11.0	6.5 / 12.6	7.3 / 14.3	8.3 / 16.2	9.2 / 18.2	10.2 / 20.3	11.3 / 22.5
20	Simple	717	854	998	1150	1313	1485	1668	1860	2063	2275
	Multiple	549	655	770	894	1028	1171	1323	1485	1656	1836
	Min. Bearing	3.1 / 6.0	3.8 / 7.2	4.4 / 8.5	5.1 / 9.8	5.8 / 11.3	6.5 / 12.9	7.3 / 14.5	8.2 / 16.3	9.1 / 18.2	10.0 / 20.2
22	Simple	590	698	814	938	1071	1212	1361	1519	1684	1858
	Multiple	451	539	633	736	846	964	1090	1223	1364	1513
	Min. Bearing	2.9 / 5.5	3.4 / 6.5	3.9 / 7.7	4.5 / 8.9	5.2 / 10.2	5.9 / 11.7	6.6 / 13.2	7.3 / 14.8	8.1 / 16.5	9.0 / 18.3
24	Simple	490	579	675	779	889	1006	1130	1261	1399	1543
	Multiple	377	450	530	616	708	807	912	1024	1142	1267
	Min. Bearing	2.6 / 5.0	3.1 / 5.9	3.6 / 7.0	4.1 / 8.1	4.7 / 9.3	5.3 / 10.6	6.0 / 12.0	6.7 / 13.5	7.4 / 15.1	8.1 / 16.7
26	Simple	384	487	568	655	748	847	952	1062	1179	1300
	Multiple	319	381	449	522	600	685	774	869	969	1070
	Min. Bearing	2.2 / 4.6	2.8 / 5.4	3.2 / 6.4	3.7 / 7.5	4.3 / 8.6	4.8 / 9.8	5.4 / 11.1	6.1 / 12.4	6.7 / 13.8	7.4 / 15.3
28	Simple	304	398	484	558	638	722	812	906	1005	1109
	Multiple	273	327	385	448	515	587	665	744	826	912
	Min. Bearing	1.9 / 4.2	2.4 / 5.0	3.0 / 5.9	3.4 / 6.9	3.9 / 7.9	4.4 / 9.0	5.0 / 10.2	5.6 / 11.5	6.2 / 12.7	6.8 / 14.0
30	Simple	245	321	411	481	549	622	699	781	866	956
	Multiple	236	283	333	388	446	509	574	641	712	786
	Min. Bearing	1.6 / 3.9	2.1 / 4.7	2.7 / 5.5	3.2 / 6.4	3.6 / 7.4	4.1 / 8.4	4.6 / 9.5	5.1 / 10.6	5.7 / 11.7	6.3 / 12.9
32	Simple	199	262	335	417	477	541	608	679	753	832
	Multiple	206	246	291	338	390	443	498	557	618	683
	Min. Bearing	1.5 / 3.6	1.8 / 4.3	2.4 / 5.1	2.9 / 6.0	3.4 / 6.9	3.8 / 7.8	4.3 / 8.8	4.8 / 9.8	5.3 / 10.9	5.9 / 12.0
34	Simple	164	216	277	349	418	474	533	595	661	729
	Multiple	181	217	256	298	342	388	436	488	541	598
	Min. Bearing	1.5 / 3.4	1.6 / 4.0	2.1 / 4.8	2.6 / 5.6	3.1 / 6.4	3.5 / 7.2	4.0 / 8.1	4.4 / 9.1	4.9 / 10.1	5.4 / 11.2
36	Simple	136	179	231	291	361	418	470	525	583	644
	Multiple	160	192	226	263	301	342	384	430	477	528
	Min. Bearing	1.5 / 3.2	1.5 / 3.8	1.8 / 4.5	2.3 / 5.2	2.9 / 6.0	3.3 / 6.8	3.7 / 7.6	4.2 / 8.5	4.6 / 9.4	5.1 / 10.4
38	Simple	113	150	194	245	304	371	417	466	518	572
	Multiple	142	170	201	233	267	303	341	381	424	468
	Min. Bearing	1.5 / 3.0	1.5 / 3.6	1.6 / 4.2	2.0 / 4.9	2.5 / 5.6	3.1 / 6.3	3.5 / 7.1	3.9 / 8.0	4.3 / 8.8	4.8 / 9.8
40	Simple	95	126	164	207	258	316	372	416	463	511
	Multiple	127	152	179	207	237	270	304	340	378	418
	Min. Bearing	1.5 / 3.0	1.5 / 3.3	1.5 / 3.9	1.8 / 4.6	2.3 / 5.2	2.8 / 5.9	3.3 / 6.7	3.7 / 7.5	4.1 / 8.3	4.5 / 9.2

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- SPAN is the on-center distance between supports and is valid for simple span applications.
- Dry-use conditions.
- Total load deflection limit = Span/180.
- Live load ≤ 0.75 x Total load
- Full lateral support on the compression side.
- The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



Allowable Load (plf) for 5-1/2-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)										
		6	7 1/2	9	9 1/2	10 1/2	11 7/8	12	13 1/2	14	15	16
6	Simple	1679	2625	3783	4216	5151	6584	6688	8027	8514	9558	10706
	Multiple	1292	2021	2913	3247	3968	4791	4860	5729	6037	6684	7377
	Min. Bearing	1.5 / 3.0	2.2 / 4.2	3.2 / 6.1	3.5 / 6.8	4.3 / 8.3	5.5 / 10.1	5.6 / 10.2	6.7 / 12.0	7.1 / 12.7	8.0 / 14.0	9.0 / 15.5
8	Simple	941	1472	2123	2366	2892	3700	3779	4785	5147	5910	6683
	Multiple	723	1133	1633	1821	2226	2849	2909	3684	3963	4450	4855
	Min. Bearing	1.5 / 3.0	1.6 / 3.2	2.4 / 4.6	2.6 / 5.1	3.2 / 6.2	4.1 / 8.0	4.2 / 8.1	5.4 / 10.3	5.8 / 11.1	6.6 / 12.4	7.5 / 13.6
10	Simple	520	939	1354	1510	1846	2363	2413	3056	3287	3775	4296
	Multiple	460	721	1041	1161	1419	1818	1856	2351	2530	2905	3307
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.9 / 3.6	2.1 / 4.1	2.6 / 5.0	3.3 / 6.4	3.4 / 6.5	4.3 / 8.2	4.6 / 8.8	5.3 / 10.2	6.0 / 11.6
12	Simple	298	587	937	1044	1277	1636	1671	2117	2277	2615	2977
	Multiple	317	498	719	802	981	1257	1284	1627	1751	2011	2290
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.0	1.8 / 3.4	2.1 / 4.1	2.7 / 5.3	2.8 / 5.4	3.6 / 6.8	3.8 / 7.3	4.4 / 8.4	5.0 / 9.6
14	Simple	184	366	637	751	935	1198	1223	1550	1668	1916	2182
	Multiple	231	363	525	586	717	920	939	1191	1281	1472	1677
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.8 / 3.5	2.3 / 4.5	2.4 / 4.6	3.0 / 5.8	3.3 / 6.3	3.8 / 7.2	4.3 / 8.2
16	Simple	121	242	423	499	677	913	933	1183	1273	1459	1651
	Multiple	162	276	399	446	546	700	715	908	977	1123	1279
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	2.0 / 3.9	2.1 / 4.0	2.6 / 5.1	2.8 / 5.5	3.3 / 6.3	3.7 / 7.2
18	Simple	83	167	294	347	471	686	708	927	994	1135	1284
	Multiple	111	216	313	349	428	550	562	713	768	883	1006
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.5	1.8 / 3.5	2.3 / 4.5	2.5 / 4.8	2.9 / 5.6	3.2 / 6.3
20	Simple	58	119	211	249	340	496	512	734	793	906	1025
	Multiple	79	160	251	281	344	442	452	574	618	711	811
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	2.1 / 4.0	2.2 / 4.3	2.5 / 5.0	2.9 / 5.7
22	Simple	--	87	155	184	252	369	381	547	611	738	835
	Multiple	--	117	206	230	282	363	371	472	508	584	666
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.6	1.9 / 3.9	2.3 / 4.5	2.6 / 5.1
24	Simple	--	65	117	139	191	280	290	417	466	577	692
	Multiple	--	88	158	187	235	302	309	393	424	488	556
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.6	1.9 / 4.1	2.3 / 4.7
26	Simple	--	49	89	107	147	217	224	324	363	449	548
	Multiple	--	67	121	144	198	255	261	332	358	413	471
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.8	2.0 / 4.3
28	Simple	--	--	69	83	115	171	176	256	287	356	435
	Multiple	--	--	95	113	156	218	223	284	306	353	403
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.7 / 3.9
30	Simple	--	--	54	65	91	136	140	205	230	286	349
	Multiple	--	--	75	89	124	184	190	245	264	305	348
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.6
32	Simple	--	--	--	51	72	109	113	165	186	232	284
	Multiple	--	--	--	71	100	148	154	213	230	265	301
	Min. Bearing	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4
34	Simple	--	--	--	--	58	88	91	135	152	190	233
	Multiple	--	--	--	--	81	121	125	183	201	231	262
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1
36	Simple	--	--	--	--	47	72	74	111	125	157	193
	Multiple	--	--	--	--	66	100	103	151	170	203	230
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
38	Simple	--	--	--	--	--	59	61	92	104	130	161
	Multiple	--	--	--	--	--	82	85	126	142	178	203
	Min. Bearing	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
40	Simple	--	--	--	--	--	48	50	76	86	109	135
	Multiple	--	--	--	--	--	68	71	106	119	149	180
	Min. Bearing	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0

**DESIGN ASSUMPTIONS:**

1. SPAN is the on-center distance between supports and is valid for simple span applications.
2. Dry-use conditions.
3. Total load deflection limit = Span/180.
4. Live load ≤ 0.75 x Total load
5. Full lateral support on the compression side.
6. The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



**Rosboro**  
**TREATED X BEAM**  
 When You Need It To Last

Allowable Load (plf) for 5-1/2-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)									
		16 1/2	18	19 1/2	21	22 1/2	24	25 1/2	27	28 1/2	30
6	Simple	11324	13385	15821	18745	22318	26786	30431	34119	38017	42127
	Multiple	7741	8915	10228	11705	13379	15292	17501	20077	23123	26778
	Min. Bearing	9.5 / 16.2	11.2 / 18.7	13.3 / 21.5	15.7 / 24.6	18.7 / 28.1	22.5 / 32.1	25.5 / 36.7	28.6 / 42.1	31.9 / 48.5	35.4 / 56.2
8	Simple	7002	8021	9149	10401	11801	13377	15163	17204	19560	22308
	Multiple	5064	5723	6430	7192	8015	8907	9877	10935	12094	13369
	Min. Bearing	7.8 / 14.2	9.0 / 16.0	10.2 / 18.0	11.6 / 20.1	13.2 / 22.4	15.0 / 24.9	17.0 / 27.6	19.2 / 30.6	21.9 / 33.8	25.0 / 37.4
10	Simple	4570	5441	6387	7192	8015	8907	9877	10935	12094	13369
	Multiple	3518	4188	4685	5187	5717	6278	6874	7506	8180	8899
	Min. Bearing	6.4 / 12.3	7.6 / 14.6	8.9 / 16.4	10.1 / 18.1	11.2 / 20.0	12.5 / 22.0	13.8 / 24.0	15.3 / 26.2	16.9 / 28.6	18.7 / 31.1
12	Simple	3167	3771	4428	5101	5817	6578	7319	8009	8747	9538
	Multiple	2436	2901	3407	3954	4440	4844	5267	5711	6176	6664
	Min. Bearing	5.3 / 10.2	6.3 / 12.2	7.4 / 14.3	8.6 / 16.6	9.8 / 18.6	11.0 / 20.3	12.3 / 22.1	13.4 / 24.0	14.7 / 25.9	16.0 / 28.0
14	Simple	2321	2744	3197	3683	4200	4750	5332	5946	6591	7267
	Multiple	1784	2125	2496	2897	3328	3789	4267	4605	4957	5323
	Min. Bearing	4.5 / 8.7	5.4 / 10.4	6.3 / 12.2	7.2 / 14.2	8.2 / 16.3	9.3 / 18.5	10.4 / 20.9	11.6 / 22.5	12.9 / 24.3	14.2 / 26.1
16	Simple	1751	2067	2409	2775	3166	3581	4020	4483	4970	5480
	Multiple	1361	1621	1905	2212	2541	2893	3268	3666	4087	4430
	Min. Bearing	3.9 / 7.6	4.6 / 9.1	5.4 / 10.7	6.2 / 12.4	7.1 / 14.2	8.0 / 16.2	9.0 / 18.3	10.0 / 20.5	11.1 / 22.9	12.3 / 24.8
18	Simple	1362	1609	1875	2161	2466	2789	3132	3493	3872	4271
	Multiple	1070	1276	1500	1742	2001	2279	2575	2879	3193	3521
	Min. Bearing	3.4 / 6.7	4.1 / 8.0	4.7 / 9.4	5.4 / 11.0	6.2 / 12.6	7.0 / 14.3	7.9 / 16.2	8.8 / 18.1	9.7 / 20.1	10.8 / 22.2
20	Simple	1088	1285	1498	1726	1970	2229	2503	2792	3096	3415
	Multiple	863	1029	1210	1405	1615	1836	2062	2301	2551	2814
	Min. Bearing	3.0 / 6.0	3.6 / 7.2	4.2 / 8.5	4.8 / 9.8	5.5 / 11.3	6.2 / 12.8	7.0 / 14.4	7.8 / 16.1	8.7 / 17.8	9.6 / 19.7
22	Simple	886	1048	1222	1408	1607	1819	2043	2279	2528	2788
	Multiple	709	846	995	1157	1323	1497	1682	1877	2082	2297
	Min. Bearing	2.7 / 5.5	3.2 / 6.5	3.8 / 7.7	4.3 / 8.9	4.9 / 10.2	5.6 / 11.5	6.3 / 12.9	7.0 / 14.4	7.8 / 16.0	8.6 / 17.7
24	Simple	735	869	1013	1168	1334	1510	1696	1893	2099	2316
	Multiple	592	707	832	960	1097	1242	1395	1557	1728	1906
	Min. Bearing	2.5 / 5.0	2.9 / 5.9	3.4 / 7.0	3.9 / 8.1	4.5 / 9.2	5.1 / 10.4	5.7 / 11.7	6.4 / 13.1	7.0 / 14.5	7.8 / 16.0
26	Simple	603	730	852	983	1123	1271	1428	1594	1769	1951
	Multiple	502	599	700	807	922	1045	1174	1311	1454	1605
	Min. Bearing	2.2 / 4.6	2.7 / 5.4	3.1 / 6.4	3.6 / 7.3	4.1 / 8.4	4.6 / 9.5	5.2 / 10.7	5.8 / 11.9	6.4 / 13.2	7.1 / 14.6
28	Simple	478	622	726	837	957	1083	1218	1359	1508	1664
	Multiple	429	509	595	687	785	890	1000	1117	1239	1368
	Min. Bearing	1.9 / 4.2	2.4 / 5.0	2.8 / 5.8	3.3 / 6.7	3.7 / 7.7	4.2 / 8.7	4.8 / 9.8	5.3 / 10.9	5.9 / 12.1	6.5 / 13.4
30	Simple	385	504	624	721	824	933	1049	1171	1300	1435
	Multiple	369	437	511	591	675	765	861	961	1067	1178
	Min. Bearing	1.6 / 3.9	2.1 / 4.6	2.6 / 5.4	3.0 / 6.2	3.5 / 7.1	3.9 / 8.0	4.4 / 9.0	4.9 / 10.1	5.5 / 11.2	6.0 / 12.4
32	Simple	313	411	527	626	715	811	912	1018	1130	1248
	Multiple	320	379	443	512	586	664	747	835	927	1024
	Min. Bearing	1.5 / 3.6	1.8 / 4.2	2.4 / 5.0	2.8 / 5.7	3.2 / 6.6	3.6 / 7.4	4.1 / 8.4	4.6 / 9.3	5.1 / 10.4	5.6 / 11.5
34	Simple	257	339	435	548	626	710	798	892	990	1094
	Multiple	279	331	387	448	512	581	654	731	812	897
	Min. Bearing	1.5 / 3.3	1.6 / 3.9	2.1 / 4.6	2.6 / 5.3	3.0 / 6.1	3.4 / 6.9	3.8 / 7.8	4.2 / 8.7	4.7 / 9.6	5.2 / 10.7
36	Simple	213	281	362	457	552	626	704	787	874	965
	Multiple	245	291	340	394	451	512	576	644	715	791
	Min. Bearing	1.5 / 3.1	1.5 / 3.7	1.8 / 4.3	2.3 / 5.0	2.8 / 5.7	3.2 / 6.4	3.5 / 7.2	4.0 / 8.1	4.4 / 9.0	4.9 / 10.0
38	Simple	178	236	304	384	477	555	625	699	776	858
	Multiple	216	257	301	348	399	453	510	571	635	701
	Min. Bearing	1.5 / 3.0	1.5 / 3.4	1.6 / 4.0	2.0 / 4.6	2.5 / 5.3	3.0 / 6.0	3.3 / 6.8	3.7 / 7.6	4.1 / 8.4	4.6 / 9.3
40	Simple	150	199	257	326	405	495	558	624	693	766
	Multiple	192	228	268	310	355	404	455	509	566	626
	Min. Bearing	1.5 / 3.0	1.5 / 3.2	1.5 / 3.7	1.8 / 4.3	2.3 / 5.0	2.8 / 5.6	3.1 / 6.4	3.5 / 7.1	3.9 / 7.9	4.3 / 8.8

**DESIGN ASSUMPTIONS:**

1. SPAN is the on-center distance between supports and is valid for simple span applications.
2. Dry-use conditions.
3. Total load deflection limit = Span/180.
4. Live load ≤ 0.75 x Total load
5. Full lateral support on the compression side.
6. The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



Allowable Load (plf) for 6-3/4-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)										
		6	7 1/2	9	9 1/2	10 1/2	11 7/8	12	13 1/2	14	15	16
6	Simple	2060	3222	4643	5174	6322	8081	8209	9852	10449	11730	13139
	Multiple	1586	2481	3575	3985	4869	5880	5964	7031	7409	8204	9053
	Min. Bearing	1.5 / 3.0	2.2 / 4.2	3.2 / 6.1	3.5 / 6.8	4.3 / 8.3	5.5 / 10.1	5.6 / 10.2	6.7 / 12.0	7.1 / 12.7	8.0 / 14.0	9.0 / 15.5
8	Simple	1155	1807	2605	2903	3549	4541	4638	5873	6316	7253	8202
	Multiple	888	1390	2005	2234	2731	3496	3570	4522	4864	5461	5958
	Min. Bearing	1.5 / 3.0	1.6 / 3.2	2.4 / 4.6	2.6 / 5.1	3.2 / 6.2	4.1 / 8.0	4.2 / 8.1	5.4 / 10.3	5.8 / 11.1	6.6 / 12.4	7.5 / 13.6
10	Simple	638	1152	1662	1853	2265	2900	2961	3750	4034	4633	5273
	Multiple	565	885	1278	1424	1742	2231	2278	2886	3104	3566	4059
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.9 / 3.6	2.1 / 4.1	2.6 / 5.0	3.3 / 6.4	3.4 / 6.5	4.3 / 8.2	4.6 / 8.8	5.3 / 10.2	6.0 / 11.6
12	Simple	365	720	1150	1282	1568	2008	2050	2598	2795	3210	3652
	Multiple	389	611	883	984	1204	1543	1576	1997	2149	2469	2810
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.0	1.8 / 3.4	2.1 / 4.1	2.7 / 5.3	2.8 / 5.4	3.6 / 6.8	3.8 / 7.3	4.4 / 8.4	5.0 / 9.6
14	Simple	226	449	782	922	1147	1470	1501	1903	2042	2330	2635
	Multiple	283	446	645	719	880	1129	1153	1462	1573	1807	2058
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.8 / 3.5	2.3 / 4.5	2.4 / 4.6	3.0 / 5.8	3.3 / 6.3	3.7 / 7.2	4.2 / 8.2
16	Simple	148	297	519	612	831	1121	1144	1434	1537	1754	1984
	Multiple	198	338	490	547	670	859	878	1114	1199	1378	1569
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	2.0 / 3.9	2.1 / 4.0	2.6 / 5.1	2.8 / 5.5	3.2 / 6.3	3.6 / 7.2
18	Simple	101	205	360	425	578	842	869	1115	1195	1364	1544
	Multiple	136	265	384	429	526	675	689	875	942	1083	1234
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.5	1.8 / 3.5	2.3 / 4.5	2.5 / 4.8	2.8 / 5.6	3.2 / 6.3
20	Simple	71	146	259	306	417	608	628	889	953	1089	1232
	Multiple	97	196	308	344	423	543	555	705	759	873	995
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	2.0 / 4.0	2.2 / 4.3	2.5 / 5.0	2.8 / 5.7
22	Simple	51	107	191	226	309	452	467	671	750	887	1004
	Multiple	70	144	252	282	346	445	455	579	623	717	818
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.6	1.9 / 3.9	2.2 / 4.5	2.5 / 5.1
24	Simple	--	79	143	170	234	344	355	512	573	708	832
	Multiple	--	108	193	229	288	371	379	483	520	599	683
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.6	1.9 / 4.1	2.3 / 4.7
26	Simple	--	60	110	131	180	266	275	398	445	551	673
	Multiple	--	82	149	177	243	313	320	408	440	505	573
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.7	2.0 / 4.2
28	Simple	--	45	85	102	141	209	216	314	352	437	534
	Multiple	--	64	116	139	191	268	273	349	375	429	487
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.7 / 3.9
30	Simple	--	--	66	80	111	167	172	251	282	350	429
	Multiple	--	--	92	110	152	225	233	299	321	368	417
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.6
32	Simple	--	--	52	63	89	134	139	203	228	284	349
	Multiple	--	--	73	88	122	182	188	258	278	318	361
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3
34	Simple	--	--	--	50	71	108	112	166	186	233	286
	Multiple	--	--	--	70	99	149	154	225	242	277	315
	Min. Bearing	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1
36	Simple	--	--	--	--	57	88	91	136	153	192	237
	Multiple	--	--	--	--	81	122	126	186	209	243	276
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
38	Simple	--	--	--	--	46	72	75	112	127	160	198
	Multiple	--	--	--	--	66	101	105	155	174	214	244
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
40	Simple	--	--	--	--	--	59	61	93	106	134	166
	Multiple	--	--	--	--	--	84	87	130	146	183	216
	Min. Bearing	--	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0

**DESIGN ASSUMPTIONS:**

- SPAN is the on-center distance between supports and is valid for simple span applications.
- Dry-use conditions.
- Total load deflection limit = Span/180.
- Live load ≤ 0.75 x Total load
- Full lateral support on the compression side.
- The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



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**TREATED X BEAM**  
 When You Need It To Last

Allowable Load (plf) for 6-3/4-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)									
		16 1/2	18	19 1/2	21	22 1/2	24	25 1/2	27	28 1/2	30
6	Simple	13898	16427	19417	23005	27391	32874	37348	41873	46658	51701
	Multiple	9500	10941	12552	14365	16420	18768	21478	24640	28378	32864
	Min. Bearing	9.5 / 16.2	11.2 / 18.7	13.3 / 21.5	15.7 / 24.6	18.7 / 28.1	22.5 / 32.1	25.5 / 36.7	28.6 / 42.1	31.9 / 48.5	35.4 / 56.2
8	Simple	8593	9844	11228	12765	14484	16417	18609	21114	24005	27378
	Multiple	6215	7023	7892	8827	9837	10932	12122	13420	14842	16407
	Min. Bearing	7.8 / 14.2	9.0 / 16.0	10.2 / 18.0	11.6 / 20.1	13.2 / 22.4	15.0 / 24.9	17.0 / 27.6	19.2 / 30.6	21.9 / 33.8	25.0 / 37.4
10	Simple	5609	6677	7824	8827	9837	10932	12122	13420	14842	16407
	Multiple	4317	5140	5750	6365	7016	7705	8436	9212	10039	10922
	Min. Bearing	6.4 / 12.3	7.6 / 14.6	8.9 / 16.4	10.1 / 18.1	11.2 / 20.0	12.5 / 22.0	13.8 / 24.0	15.3 / 26.2	16.9 / 28.6	18.7 / 31.1
12	Simple	3873	4572	5325	6133	6994	7909	8877	9830	10735	11705
	Multiple	2990	3561	4181	4852	5449	5945	6464	7008	7579	8179
	Min. Bearing	5.3 / 10.2	6.3 / 12.2	7.3 / 14.3	8.4 / 16.6	9.6 / 18.6	10.8 / 20.3	12.1 / 22.1	13.4 / 24.0	14.7 / 25.9	16.0 / 28.0
14	Simple	2795	3299	3844	4427	5050	5711	6410	7148	7924	8737
	Multiple	2189	2608	3064	3556	4084	4650	5237	5652	6084	6533
	Min. Bearing	4.5 / 8.7	5.3 / 10.4	6.1 / 12.2	7.1 / 14.2	8.1 / 16.3	9.1 / 18.5	10.2 / 20.9	11.4 / 22.5	12.6 / 24.3	13.9 / 26.1
16	Simple	2105	2485	2896	3336	3806	4305	4833	5389	5975	6589
	Multiple	1670	1990	2338	2714	3118	3550	3985	4445	4928	5435
	Min. Bearing	3.8 / 7.6	4.5 / 9.1	5.3 / 10.7	6.1 / 12.4	6.9 / 14.2	7.8 / 16.2	8.8 / 18.2	9.8 / 20.3	10.9 / 22.5	12.0 / 24.8
18	Simple	1637	1934	2254	2598	2964	3353	3764	4199	4655	5134
	Multiple	1314	1566	1841	2137	2442	2763	3103	3461	3838	4233
	Min. Bearing	3.4 / 6.7	4.0 / 8.0	4.6 / 9.4	5.3 / 11.0	6.1 / 12.5	6.9 / 14.2	7.7 / 15.9	8.6 / 17.7	9.5 / 19.7	10.5 / 21.7
20	Simple	1307	1544	1801	2075	2368	2679	3009	3356	3722	4105
	Multiple	1059	1263	1482	1708	1950	2207	2479	2765	3067	3383
	Min. Bearing	3.0 / 6.0	3.5 / 7.2	4.1 / 8.4	4.7 / 9.7	5.4 / 11.1	6.1 / 12.6	6.9 / 14.1	7.7 / 15.8	8.5 / 17.5	9.4 / 19.3
22	Simple	1065	1259	1468	1692	1932	2186	2456	2740	3038	3352
	Multiple	870	1035	1207	1392	1590	1799	2021	2256	2502	2760
	Min. Bearing	2.7 / 5.5	3.2 / 6.5	3.7 / 7.6	4.2 / 8.7	4.8 / 10.0	5.5 / 11.3	6.2 / 12.7	6.9 / 14.1	7.6 / 15.7	8.4 / 17.3
24	Simple	883	1044	1218	1404	1603	1815	2038	2275	2523	2784
	Multiple	725	857	1000	1154	1318	1492	1677	1872	2076	2291
	Min. Bearing	2.4 / 5.0	2.9 / 5.9	3.3 / 6.8	3.8 / 7.9	4.4 / 9.0	5.0 / 10.2	5.6 / 11.5	6.2 / 12.8	6.9 / 14.2	7.6 / 15.7
26	Simple	740	878	1024	1182	1349	1528	1717	1916	2125	2345
	Multiple	608	720	841	970	1108	1255	1411	1575	1748	1929
	Min. Bearing	2.2 / 4.5	2.6 / 5.3	3.0 / 6.2	3.5 / 7.2	4.0 / 8.2	4.5 / 9.3	5.1 / 10.5	5.7 / 11.7	6.3 / 12.9	6.9 / 14.3
28	Simple	587	747	872	1006	1150	1302	1463	1633	1812	2000
	Multiple	517	612	715	825	943	1069	1202	1342	1489	1644
	Min. Bearing	1.9 / 4.1	2.4 / 4.9	2.8 / 5.7	3.2 / 6.6	3.7 / 7.5	4.2 / 8.5	4.7 / 9.6	5.2 / 10.7	5.8 / 11.9	6.4 / 13.1
30	Simple	472	618	750	866	990	1121	1260	1407	1562	1724
	Multiple	443	525	614	709	811	919	1034	1155	1282	1416
	Min. Bearing	1.6 / 3.8	2.1 / 4.5	2.6 / 5.2	3.0 / 6.1	3.4 / 6.9	3.8 / 7.9	4.3 / 8.8	4.8 / 9.9	5.3 / 11.0	5.9 / 12.1
32	Simple	384	504	647	752	859	974	1095	1223	1358	1499
	Multiple	384	455	532	615	704	798	898	1003	1114	1230
	Min. Bearing	1.5 / 3.5	1.8 / 4.1	2.4 / 4.9	2.7 / 5.6	3.1 / 6.4	3.6 / 7.3	4.0 / 8.2	4.5 / 9.1	5.0 / 10.2	5.5 / 11.2
34	Simple	316	416	534	658	752	853	959	1072	1190	1314
	Multiple	335	397	465	537	615	698	785	878	975	1077
	Min. Bearing	1.5 / 3.2	1.6 / 3.8	2.1 / 4.5	2.5 / 5.2	2.9 / 6.0	3.3 / 6.8	3.7 / 7.6	4.2 / 8.5	4.6 / 9.4	5.1 / 10.4
36	Simple	262	345	445	561	663	752	846	945	1050	1160
	Multiple	294	349	409	473	541	614	692	773	859	950
	Min. Bearing	1.5 / 3.0	1.5 / 3.6	1.8 / 4.2	2.3 / 4.8	2.7 / 5.6	3.1 / 6.3	3.5 / 7.1	3.9 / 7.9	4.3 / 8.8	4.8 / 9.7
38	Simple	219	289	373	472	586	667	751	839	932	1030
	Multiple	259	308	361	418	479	544	613	686	762	842
	Min. Bearing	1.5 / 3.0	1.5 / 3.3	1.6 / 3.9	2.0 / 4.5	2.5 / 5.2	2.9 / 5.9	3.3 / 6.6	3.6 / 7.4	4.0 / 8.3	4.5 / 9.1
40	Simple	183	244	316	400	497	595	670	749	832	920
	Multiple	230	274	321	372	427	485	546	611	680	751
	Min. Bearing	1.5 / 3.0	1.5 / 3.1	1.5 / 3.7	1.8 / 4.2	2.3 / 4.9	2.7 / 5.5	3.1 / 6.2	3.4 / 7.0	3.8 / 7.7	4.2 / 8.6

**DESIGN ASSUMPTIONS:**

- SPAN is the on-center distance between supports and is valid for simple span applications.
- Dry-use conditions.
- Total load deflection limit = Span/180.
- Live load ≤ 0.75 x Total load
- Full lateral support on the compression side.
- The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



Allowable Load (plf) for 8-3/4-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)										
		6	7 1/2	9	9 1/2	10 1/2	11 7/8	12	13 1/2	14	15	16
6	Simple	2671	4177	6018	6707	8195	10475	10641	12771	13545	15206	17032
	Multiple	2056	3216	4635	5165	6312	7622	7732	9114	9604	10634	11736
	Min. Bearing	1.5 / 3.0	2.2 / 4.2	3.2 / 6.1	3.5 / 6.8	4.3 / 8.3	5.5 / 10.1	5.6 / 10.2	6.7 / 12.0	7.1 / 12.7	8.0 / 14.0	9.0 / 15.5
8	Simple	1497	2342	3377	3764	4600	5887	6012	7613	8188	9402	10632
	Multiple	1151	1802	2599	2897	3541	4532	4628	5861	6305	7079	7723
	Min. Bearing	1.5 / 3.0	1.6 / 3.2	2.4 / 4.6	2.6 / 5.1	3.2 / 6.2	4.1 / 8.0	4.2 / 8.1	5.4 / 10.3	5.8 / 11.1	6.6 / 12.4	7.5 / 13.6
10	Simple	827	1493	2154	2402	2936	3759	3838	4862	5230	5996	6780
	Multiple	732	1148	1656	1847	2258	2892	2953	3741	4024	4622	5261
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.9 / 3.6	2.1 / 4.1	2.6 / 5.0	3.3 / 6.4	3.4 / 6.5	4.3 / 8.2	4.6 / 8.8	5.3 / 10.2	6.0 / 11.6
12	Simple	473	933	1490	1662	2032	2602	2658	3336	3576	4078	4613
	Multiple	504	792	1144	1276	1561	2000	2043	2589	2786	3200	3643
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.0	1.8 / 3.4	2.1 / 4.1	2.7 / 5.3	2.8 / 5.4	3.5 / 6.8	3.8 / 7.3	4.3 / 8.4	4.9 / 9.6
14	Simple	293	582	1014	1195	1487	1882	1921	2405	2579	2942	3328
	Multiple	367	578	836	932	1141	1463	1494	1895	2039	2343	2668
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.8 / 3.5	2.3 / 4.5	2.4 / 4.6	3.0 / 5.8	3.2 / 6.3	3.6 / 7.2	4.1 / 8.2
16	Simple	192	385	673	794	1077	1416	1445	1810	1941	2215	2506
	Multiple	257	439	635	709	868	1114	1138	1444	1554	1786	2034
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	2.0 / 3.9	2.0 / 4.0	2.5 / 5.1	2.7 / 5.5	3.1 / 6.3	3.5 / 7.2
18	Simple	131	265	467	552	750	1091	1123	1407	1509	1722	1949
	Multiple	177	343	498	556	682	875	894	1135	1221	1404	1600
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.5	1.8 / 3.5	2.2 / 4.5	2.4 / 4.8	2.7 / 5.6	3.1 / 6.3
20	Simple	92	189	335	397	540	789	814	1122	1204	1374	1555
	Multiple	125	254	400	446	548	704	719	914	984	1130	1279
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	2.0 / 4.0	2.1 / 4.3	2.4 / 5.0	2.7 / 5.6
22	Simple	66	138	247	293	400	586	606	870	972	1119	1267
	Multiple	91	187	327	365	449	577	590	750	804	919	1041
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.7 / 3.6	1.9 / 3.9	2.2 / 4.4	2.5 / 5.0
24	Simple	48	103	186	221	303	446	461	663	742	918	1050
	Multiple	67	140	251	297	374	481	492	620	665	760	861
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.6 / 3.5	1.9 / 4.0	2.2 / 4.5
26	Simple	--	77	142	169	234	345	357	516	577	715	872
	Multiple	--	107	193	229	315	404	413	519	558	638	723
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.6 / 3.6	2.0 / 4.1
28	Simple	--	59	110	132	183	271	281	407	456	566	692
	Multiple	--	82	151	180	247	342	350	440	473	541	614
	Min. Bearing	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.7 / 3.8
30	Simple	--	--	86	103	144	216	223	326	365	454	556
	Multiple	--	--	119	142	197	292	299	377	405	464	526
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.5
32	Simple	--	--	67	82	115	173	180	263	296	369	452
	Multiple	--	--	95	114	158	236	244	326	350	401	455
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2
34	Simple	--	--	53	65	92	140	145	215	242	302	371
	Multiple	--	--	76	91	128	193	199	283	305	349	397
	Min. Bearing	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
36	Simple	--	--	--	51	74	114	119	176	199	249	307
	Multiple	--	--	--	74	105	158	164	241	267	306	348
	Min. Bearing	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
38	Simple	--	--	--	--	60	93	97	146	165	207	256
	Multiple	--	--	--	--	86	131	136	201	226	270	307
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0
40	Simple	--	--	--	--	48	76	79	121	137	173	215
	Multiple	--	--	--	--	70	109	113	168	190	238	272
	Min. Bearing	--	--	--	--	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0

**DESIGN ASSUMPTIONS:**

1. SPAN is the on-center distance between supports and is valid for simple span applications.
2. Dry-use conditions.
3. Total load deflection limit = Span/180.
4. Live load ≤ 0.75 x Total load
5. Full lateral support on the compression side.
6. The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).



**Rosboro**  
**TREATED X BEAM**  
 When You Need It To Last

Allowable Load (plf) for 8-3/4-inch Wide 24F-V4/DF Glulam Roof Beams - 115% Snow Load

Span (ft)	Span Type	Glulam Depth (in.)									
		16 1/2	18	19 1/2	21	22 1/2	24	25 1/2	27	28 1/2	30
6	Simple	18015	21294	25170	29821	35506	42614	48240	53777	59598	65701
	Multiple	12315	14183	16272	18621	21285	24329	27842	31941	36786	42601
	Min. Bearing	9.5 / 16.2	11.2 / 18.7	13.3 / 21.5	15.7 / 24.6	18.7 / 28.1	22.5 / 32.1	25.4 / 36.7	28.4 / 42.1	31.4 / 48.5	34.7 / 56.2
8	Simple	11139	12761	14554	16547	18775	21281	24123	27370	31118	35490
	Multiple	8057	9104	10230	11442	12752	14171	15713	17396	19240	21269
	Min. Bearing	7.8 / 14.2	9.0 / 16.0	10.2 / 18.0	11.6 / 20.1	13.2 / 22.4	15.0 / 24.9	17.0 / 27.6	19.2 / 30.6	21.9 / 33.8	25.0 / 37.4
10	Simple	7189	8485	9882	11379	12752	14171	15713	17396	19240	21269
	Multiple	5596	6663	7454	8251	9095	9988	10935	11942	13014	14158
	Min. Bearing	6.3 / 12.3	7.5 / 14.6	8.7 / 16.4	10.0 / 18.1	11.2 / 20.0	12.5 / 22.0	13.8 / 24.0	15.3 / 26.2	16.9 / 28.6	18.7 / 31.1
12	Simple	4891	5774	6725	7745	8833	9988	11211	12500	13855	15174
	Multiple	3875	4616	5420	6290	7063	7706	8380	9085	9825	10602
	Min. Bearing	5.2 / 10.2	6.1 / 12.2	7.1 / 14.3	8.2 / 16.6	9.3 / 18.6	10.5 / 20.3	11.8 / 22.1	13.2 / 24.0	14.6 / 25.9	16.0 / 28.0
14	Simple	3529	4166	4854	5591	6377	7212	8095	9027	10007	11034
	Multiple	2838	3381	3971	4609	5260	5949	6679	7327	7887	8469
	Min. Bearing	4.3 / 8.7	5.1 / 10.4	6.0 / 12.2	6.9 / 14.2	7.8 / 16.2	8.9 / 18.3	10.0 / 20.5	11.1 / 22.5	12.3 / 24.3	13.6 / 26.1
16	Simple	2657	3138	3657	4213	4806	5436	6103	6806	7545	8320
	Multiple	2165	2580	3014	3473	3962	4482	5032	5613	6223	6863
	Min. Bearing	3.7 / 7.6	4.4 / 9.1	5.1 / 10.6	5.9 / 12.2	6.8 / 13.9	7.6 / 15.8	8.6 / 17.7	9.6 / 19.7	10.6 / 21.9	11.7 / 24.1
18	Simple	2067	2442	2846	3280	3742	4234	4753	5302	5878	6483
	Multiple	1702	2011	2344	2702	3083	3489	3918	4370	4846	5345
	Min. Bearing	3.3 / 6.7	3.9 / 8.0	4.5 / 9.3	5.2 / 10.7	5.9 / 12.2	6.7 / 13.8	7.5 / 15.5	8.4 / 17.3	9.3 / 19.2	10.3 / 21.1
20	Simple	1650	1950	2273	2620	2990	3383	3799	4238	4700	5184
	Multiple	1357	1604	1871	2157	2462	2786	3129	3491	3872	4271
	Min. Bearing	2.9 / 6.0	3.4 / 7.1	4.0 / 8.2	4.6 / 9.5	5.3 / 10.8	5.9 / 12.2	6.7 / 13.8	7.5 / 15.3	8.3 / 17.0	9.1 / 18.8
22	Simple	1344	1589	1853	2137	2439	2760	3100	3459	3836	4232
	Multiple	1105	1306	1524	1757	2007	2271	2552	2848	3159	3485
	Min. Bearing	2.6 / 5.3	3.1 / 6.3	3.6 / 7.4	4.1 / 8.5	4.7 / 9.7	5.3 / 11.0	6.0 / 12.3	6.7 / 13.8	7.4 / 15.3	8.2 / 16.9
24	Simple	1114	1317	1537	1772	2024	2291	2573	2872	3185	3514
	Multiple	914	1082	1263	1456	1664	1884	2117	2362	2621	2892
	Min. Bearing	2.4 / 4.8	2.8 / 5.7	3.2 / 6.7	3.7 / 7.7	4.3 / 8.8	4.8 / 9.9	5.4 / 11.2	6.1 / 12.5	6.7 / 13.8	7.4 / 15.3
26	Simple	936	1108	1293	1491	1703	1928	2167	2418	2683	2961
	Multiple	767	908	1061	1224	1399	1584	1781	1988	2206	2435
	Min. Bearing	2.1 / 4.4	2.5 / 5.2	3.0 / 6.1	3.4 / 7.0	3.9 / 8.0	4.4 / 9.1	5.0 / 10.2	5.5 / 11.4	6.1 / 12.6	6.8 / 13.9
28	Simple	761	942	1100	1270	1451	1643	1847	2062	2288	2525
	Multiple	652	772	902	1041	1190	1349	1516	1693	1879	2075
	Min. Bearing	1.9 / 4.0	2.3 / 4.8	2.7 / 5.6	3.1 / 6.4	3.6 / 7.3	4.0 / 8.3	4.5 / 9.3	5.1 / 10.4	5.6 / 11.6	6.2 / 12.8
30	Simple	612	802	946	1093	1249	1415	1590	1776	1971	2176
	Multiple	559	663	775	895	1023	1160	1304	1457	1618	1786
	Min. Bearing	1.6 / 3.7	2.1 / 4.4	2.5 / 5.1	2.9 / 5.9	3.3 / 6.7	3.7 / 7.6	4.2 / 8.6	4.7 / 9.6	5.2 / 10.7	5.7 / 11.8
32	Simple	498	654	821	948	1084	1229	1382	1543	1713	1892
	Multiple	484	574	671	776	888	1006	1132	1265	1405	1552
	Min. Bearing	1.5 / 3.4	1.8 / 4.0	2.3 / 4.7	2.7 / 5.5	3.1 / 6.2	3.5 / 7.1	3.9 / 8.0	4.3 / 8.9	4.8 / 9.9	5.3 / 10.9
34	Simple	409	539	692	830	949	1076	1210	1352	1501	1658
	Multiple	422	501	586	678	776	880	990	1107	1230	1359
	Min. Bearing	1.5 / 3.2	1.6 / 3.7	2.1 / 4.4	2.5 / 5.1	2.8 / 5.8	3.2 / 6.6	3.6 / 7.4	4.0 / 8.3	4.5 / 9.2	5.0 / 10.2
36	Simple	339	448	577	727	836	948	1067	1193	1325	1463
	Multiple	370	440	515	596	683	775	872	975	1084	1198
	Min. Bearing	1.5 / 3.0	1.5 / 3.5	1.8 / 4.1	2.3 / 4.7	2.6 / 5.4	3.0 / 6.1	3.4 / 6.9	3.8 / 7.7	4.2 / 8.6	4.6 / 9.5
38	Simple	283	375	484	612	741	841	947	1058	1176	1299
	Multiple	327	388	455	527	604	686	773	864	961	1062
	Min. Bearing	1.5 / 3.0	1.5 / 3.2	1.6 / 3.8	2.0 / 4.4	2.5 / 5.0	2.8 / 5.7	3.2 / 6.5	3.5 / 7.2	3.9 / 8.0	4.3 / 8.9
40	Simple	238	316	409	518	644	750	845	945	1050	1160
	Multiple	290	345	405	469	538	611	688	770	857	947
	Min. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.6	1.8 / 4.1	2.3 / 4.7	2.6 / 5.4	3.0 / 6.1	3.3 / 6.8	3.7 / 7.5	4.1 / 8.3

**DESIGN ASSUMPTIONS:**

1. SPAN is the on-center distance between supports and is valid for simple span applications.
2. Dry-use conditions.
3. Total load deflection limit = Span/180.
4. Live load ≤ 0.75 x Total load
5. Full lateral support on the compression side.
6. The values are based on the design properties listed in EWS Y117 and are in addition to the beam weight (assumed 35 pcf).