

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 3 1/8" Roof Load Tables – 115% Snow

Span [ft]	24F-V4 Grade – 115% Load Duration In pounds per lineal foot (PLF)									
	Span Type	6"	7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"
6	Simple	954	1492	2149	2927	3800	4561	5431	6434	7605
	Multiple	734	1149	1655	2254	2761	3255	3798	4398	5065
	Min. Bearing	1.5 / 3	2.2 / 4.3	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1	9.5 / 16.3	11.3 / 18.8
8	Simple	535	837	1206	1643	2147	2719	3358	3978	4558
	Multiple	411	644	928	1265	1653	2093	2528	2877	3252
	Min. Bearing	1.5 / 3	1.7 / 3.2	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5	7.9 / 14.2	9 / 16.1
10	Simple	295	533	769	1049	1371	1736	2145	2597	3091
	Multiple	261	410	592	806	1055	1336	1651	1999	2380
	Min. Bearing	1.5 / 3	1.5 / 3	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2	6.4 / 12.4	7.6 / 14.7
12	Simple	169	333	532	726	949	1203	1486	1799	2143
	Multiple	180	283	409	558	730	925	1143	1384	1648
	Min. Bearing	1.5 / 3	1.5 / 3	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.6 / 6.9	4.4 / 8.5	5.4 / 10.3	6.4 / 12.3
14	Simple	105	208	362	531	695	881	1089	1319	1571
	Multiple	131	206	298	408	534	677	837	1014	1207
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.9 / 3.6	2.4 / 4.7	3.1 / 5.9	3.8 / 7.3	4.6 / 8.8	5.5 / 10.5
16	Simple	69	137	240	385	530	672	831	1007	1199
	Multiple	92	157	227	310	406	516	638	773	921
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	2.1 / 4.1	2.7 / 5.2	3.3 / 6.4	4 / 7.7	4.8 / 9.2
18	Simple	47	95	167	268	402	529	654	793	945
	Multiple	63	123	178	243	319	405	502	608	725
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 3.6	2.4 / 4.6	2.9 / 5.7	3.6 / 6.9	4.2 / 8.2
20	Simple	-	68	120	193	291	417	528	640	763
	Multiple	-	91	143	196	257	326	404	490	585
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2.1 / 4.1	2.7 / 5.1	3.2 / 6.2	3.8 / 7.4
22	Simple	-	49	88	143	216	311	429	527	628
	Multiple	-	67	117	160	211	268	332	403	481
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.8	2.4 / 4.6	2.9 / 5.6	3.5 / 6.7
24	Simple	-	-	66	108	164	237	328	439	523
	Multiple	-	-	89	133	176	223	277	337	400
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2 / 4.3	2.7 / 5.2	3.2 / 6.1
26	Simple	-	-	51	84	127	184	255	342	440
	Multiple	-	-	69	112	148	189	234	284	336
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 3.9	2.3 / 4.7	2.9 / 5.6
28	Simple	-	-	-	65	100	145	202	272	355
	Multiple	-	-	-	88	127	161	200	241	286
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 4.4	2.5 / 5.2
30	Simple	-	-	-	52	80	116	162	219	286
	Multiple	-	-	-	70	108	139	172	207	245
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.7 / 4.1	2.2 / 4.8
32	Simple	-	-	-	-	64	94	132	178	234
	Multiple	-	-	-	-	87	121	149	179	212
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.8	1.9 / 4.5
34	Simple	-	-	-	-	52	77	108	146	192
	Multiple	-	-	-	-	71	104	129	156	185
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.7 / 4.2
36	Simple	-	-	-	-	-	63	89	121	160
	Multiple	-	-	-	-	-	86	113	137	163
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.3	1.5 / 3.9
38	Simple	-	-	-	-	-	52	74	101	134
	Multiple	-	-	-	-	-	72	100	121	144
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.7
40	Simple	-	-	-	-	-	-	62	85	113
	Multiple	-	-	-	-	-	-	85	107	128
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.5

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load equal to 0.75 of total load, for greater live/total applications (e.g. 50 psf snow or higher), analyze specific application with BC CALC® software.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 5 1/8" Roof Load Tables – 115% Snow

Span [ft]	24F-V4 Grade – 115% Load Duration In pounds per lineal foot (PLF)													
	Span Type	6"	7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
6	Simple	1564	2446	3525	4800	6232	7480	8906	10552	12472				
	Multiple	1204	1884	2715	3697	4529	5338	6229	7213	8307				
	Min. Bearing	1.5 / 3	2.2 / 4.3	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1	9.5 / 16.3	11.3 / 18.8				
8	Simple	877	1372	1978	2694	3521	4459	5507	6524	7474	8525	9692		
	Multiple	674	1055	1522	2074	2711	3433	4146	4719	5332	5992	6702		
	Min. Bearing	1.5 / 3	1.7 / 3.2	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5	7.9 / 14.2	9 / 16.1	10.3 / 18.1	11.7 / 20.2		
10	Simple	485	875	1262	1720	2248	2848	3518	4258	5070	5952	6702	7469	
	Multiple	429	672	970	1323	1730	2191	2707	3278	3903	4366	4833	5327	
	Min. Bearing	1.5 / 3	1.5 / 3	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2	6.4 / 12.4	7.6 / 14.7	9 / 16.5	10.1 / 18.2	11.3 / 20.1	
12	Simple	277	547	873	1190	1557	1972	2437	2951	3514	4126	4787	5459	6173
	Multiple	295	464	670	914	1197	1516	1874	2270	2703	3175	3684	4137	4514
	Min. Bearing	1.5 / 3	1.5 / 3	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.6 / 6.9	4.4 / 8.5	5.4 / 10.3	6.4 / 12.3	7.5 / 14.4	8.7 / 16.7	9.9 / 18.8	11.2 / 20.5
14	Simple	172	341	594	871	1140	1445	1786	2163	2576	3001	3456	3942	4458
	Multiple	215	338	489	668	875	1110	1372	1662	1980	2307	2658	3032	3429
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.9 / 3.6	2.4 / 4.7	3.1 / 5.9	3.8 / 7.3	4.6 / 8.8	5.5 / 10.5	6.4 / 12.2	7.3 / 14.1	8.3 / 16.1	9.4 / 18.2
16	Simple	113	225	394	631	869	1102	1363	1643	1940	2261	2605	2971	3360
	Multiple	151	257	372	509	667	846	1046	1262	1491	1737	2002	2284	2584
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	2.1 / 4.1	2.7 / 5.2	3.3 / 6.4	4 / 7.7	4.7 / 9.1	5.5 / 10.6	6.3 / 12.2	7.2 / 13.9	8.1 / 15.7
18	Simple	77	155	274	439	660	867	1065	1279	1510	1760	2028	2314	2618
	Multiple	103	201	292	399	523	665	817	981	1159	1351	1557	1777	2011
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 3.6	2.4 / 4.6	2.9 / 5.6	3.5 / 6.8	4.1 / 8	4.8 / 9.3	5.5 / 10.7	6.3 / 12.2	7.2 / 13.8
20	Simple	54	111	196	317	477	684	850	1021	1206	1406	1620	1849	2092
	Multiple	73	149	234	321	421	531	651	782	925	1078	1243	1419	1606
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2.1 / 4.1	2.6 / 5	3.1 / 6	3.7 / 7.1	4.3 / 8.3	4.9 / 9.5	5.6 / 10.9	6.4 / 12.3
22	Simple	-	81	145	235	355	509	693	832	983	1146	1322	1509	1707
	Multiple	-	109	192	263	344	432	530	636	753	878	1013	1156	1309
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.7	2.3 / 4.5	2.8 / 5.4	3.3 / 6.4	3.9 / 7.5	4.5 / 8.6	5.1 / 9.8	5.7 / 11.1
24	Simple	-	60	109	178	270	389	537	689	815	951	1097	1252	1417
	Multiple	-	82	147	219	284	357	438	527	623	727	839	959	1085
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2 / 4.1	2.6 / 4.9	3 / 5.8	3.5 / 6.8	4 / 7.8	4.6 / 8.9	5.2 / 10
26	Simple	-	45	83	137	209	302	419	562	686	800	923	1054	1193
	Multiple	-	63	113	183	238	299	367	442	523	611	705	806	913
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.7 / 3.8	2.3 / 4.5	2.8 / 5.3	3.2 / 6.2	3.7 / 7.1	4.2 / 8.1	4.8 / 9.2
28	Simple	-	-	64	107	164	238	332	446	583	681	786	898	1017
	Multiple	-	-	88	145	201	254	312	375	445	520	600	686	777
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2 / 4.2	2.5 / 4.9	3 / 5.7	3.4 / 6.6	3.9 / 7.5	4.4 / 8.5
30	Simple	-	-	50	85	131	191	266	358	470	586	677	773	876
	Multiple	-	-	70	115	172	217	267	322	382	446	515	589	668
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 3.9	2.2 / 4.5	2.7 / 5.3	3.2 / 6.1	3.6 / 7	4.1 / 7.9
32	Simple	-	-	-	67	105	154	216	292	383	491	587	672	761
	Multiple	-	-	-	93	143	187	231	279	330	387	447	511	580
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	1.9 / 4.2	2.5 / 4.9	2.9 / 5.7	3.4 / 6.5	3.8 / 7.3
34	Simple	-	-	-	54	85	126	177	240	316	405	511	588	666
	Multiple	-	-	-	75	117	163	201	243	288	337	390	447	507
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.7 / 4	2.2 / 4.6	2.7 / 5.3	3.1 / 6.1	3.6 / 6.8
36	Simple	-	-	-	-	69	103	146	199	262	338	426	518	588
	Multiple	-	-	-	-	96	141	176	213	253	297	343	393	446
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 3.7	2 / 4.3	2.4 / 5	3 / 5.7	3.3 / 6.4
38	Simple	-	-	-	-	57	85	121	166	220	284	358	445	521
	Multiple	-	-	-	-	79	118	155	188	224	262	304	348	395
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.8 / 4.1	2.2 / 4.7	2.7 / 5.4	3.1 / 6.1
40	Simple	-	-	-	-	47	71	101	139	185	240	303	377	462
	Multiple	-	-	-	-	66	98	138	167	198	233	270	309	352
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.6 / 3.9	2 / 4.4	2.4 / 5.1	3 / 5.7

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- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load equal to 0.75 of total load, for greater live/total applications (e.g. 50 psf snow or higher), analyze specific application with BC CALC® software.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 6¾" Roof Load Tables – 115% Snow

Span [ft]	24F-V4 Grade – 115% Load Duration In pounds per lineal foot (PLF)												
	Span Type	7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
6	Simple	3222	4643	6322	8209	9852	11730	13898	16427				
	Multiple	2481	3575	4869	5964	7031	8204	9500	10941				
	Min. Bearing	2.2 / 4.3	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1	9.5 / 16.3	11.3 / 18.8				
8	Simple	1807	2605	3549	4638	5872	7253	8593	9844	11228	12765		
	Multiple	1390	2005	2731	3570	4522	5461	6215	7023	7892	8827		
	Min. Bearing	1.7 / 3.2	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5	7.9 / 14.2	9 / 16.1	10.3 / 18.1	11.7 / 20.2		
10	Simple	1152	1662	2265	2961	3750	4633	5609	6677	7824	8827	9837	
	Multiple	885	1278	1742	2278	2886	3566	4317	5140	5750	6365	7016	
	Min. Bearing	1.5 / 3	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2	6.4 / 12.4	7.6 / 14.7	9 / 16.5	10.1 / 18.2	11.3 / 20.1	
12	Simple	720	1150	1568	2050	2598	3210	3873	4572	5325	6133	6994	7909
	Multiple	611	883	1204	1576	1997	2469	2979	3517	4097	4719	5383	5945
	Min. Bearing	1.5 / 3	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.6 / 6.9	4.4 / 8.5	5.3 / 10.3	6.3 / 12.1	7.3 / 14.1	8.4 / 16.3	9.6 / 18.5	10.9 / 20.5
14	Simple	449	782	1147	1501	1903	2330	2795	3299	3844	4427	5050	5711
	Multiple	446	645	880	1153	1462	1790	2148	2536	2955	3405	3884	4393
	Min. Bearing	1.5 / 3	1.5 / 3	1.9 / 3.6	2.4 / 4.7	3.1 / 5.9	3.8 / 7.2	4.5 / 8.7	5.3 / 10.2	6.2 / 11.9	7.1 / 13.7	8.1 / 15.6	9.2 / 17.7
16	Simple	297	519	831	1144	1434	1754	2105	2485	2896	3336	3806	4305
	Multiple	338	490	670	878	1100	1346	1616	1909	2225	2564	2925	3309
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3.1	2.1 / 4.1	2.7 / 5.1	3.2 / 6.2	3.9 / 7.5	4.6 / 8.8	5.3 / 10.3	6.1 / 11.8	7 / 13.5	7.9 / 15.3
18	Simple	205	360	578	869	1115	1364	1637	1934	2254	2598	2964	3353
	Multiple	265	384	526	681	854	1046	1256	1484	1730	1994	2276	2575
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 3.6	2.3 / 4.5	2.8 / 5.5	3.4 / 6.6	4 / 7.8	4.7 / 9	5.4 / 10.4	6.2 / 11.9	7 / 13.4
20	Simple	146	259	417	628	889	1089	1307	1544	1801	2075	2368	2679
	Multiple	196	308	418	542	680	833	1001	1184	1381	1592	1817	2056
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	2.1 / 4	2.5 / 4.9	3 / 5.9	3.6 / 6.9	4.2 / 8	4.8 / 9.3	5.5 / 10.6	6.2 / 11.9
22	Simple	107	191	309	467	671	887	1065	1259	1468	1692	1932	2186
	Multiple	144	251	339	440	553	678	815	964	1124	1297	1481	1676
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.6	2.3 / 4.4	2.7 / 5.3	3.2 / 6.2	3.8 / 7.2	4.3 / 8.3	4.9 / 9.5	5.6 / 10.8
24	Simple	79	143	234	355	512	708	883	1044	1218	1404	1603	1815
	Multiple	108	193	280	363	457	561	674	798	931	1074	1227	1390
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2 / 4	2.5 / 4.8	2.9 / 5.7	3.4 / 6.6	3.9 / 7.6	4.5 / 8.6	5.1 / 9.8
26	Simple	60	110	180	275	398	551	740	878	1024	1182	1349	1528
	Multiple	82	149	234	304	383	470	566	670	782	903	1032	1169
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.7	2.3 / 4.4	2.7 / 5.2	3.1 / 6	3.6 / 6.9	4.1 / 7.9	4.6 / 8.9
28	Simple	45	85	141	216	314	437	587	747	872	1006	1150	1302
	Multiple	64	116	191	257	324	399	480	569	665	768	878	995
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2 / 4	2.5 / 4.8	2.9 / 5.6	3.3 / 6.4	3.8 / 7.3	4.3 / 8.2
30	Simple	-	66	111	172	251	350	472	618	750	866	990	1121
	Multiple	-	92	152	220	278	342	412	488	571	660	754	855
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.7 / 3.8	2.2 / 4.4	2.7 / 5.2	3.1 / 5.9	3.5 / 6.8	4 / 7.6
32	Simple	-	52	89	139	203	284	384	504	647	752	859	974
	Multiple	-	73	122	188	240	295	356	423	494	572	654	742
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.9 / 4.1	2.5 / 4.8	2.9 / 5.5	3.3 / 6.3	3.7 / 7.1
34	Simple	-	-	71	112	166	233	316	416	534	658	752	853
	Multiple	-	-	99	154	208	257	310	369	432	499	571	648
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.7 / 3.9	2.2 / 4.5	2.7 / 5.2	3.1 / 5.9	3.5 / 6.7
36	Simple	-	-	57	91	136	192	262	345	445	561	663	752
	Multiple	-	-	81	126	182	225	272	324	379	439	503	571
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.6	2 / 4.2	2.4 / 4.9	2.9 / 5.5	3.2 / 6.3
38	Simple	-	-	46	75	112	160	219	289	373	472	586	667
	Multiple	-	-	66	105	155	198	240	286	335	388	445	505
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.8 / 4	2.2 / 4.6	2.7 / 5.2	3.1 / 5.9
40	Simple	-	-	-	61	93	134	183	244	316	400	497	595
	Multiple	-	-	-	87	130	176	213	253	298	345	396	449
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.6 / 3.8	2 / 4.3	2.4 / 4.9

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load equal to 0.75 of total load, for greater live/total applications (e.g. 50 psf snow or higher), analyze specific application with BC CALC® software.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC Calc software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 8 3/4" Roof Load Tables – 115% Snow

24F-V4 Grade – 115% Load Duration In pounds per lineal foot (PLF)

Span [ft]	Span Type	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
		6	Simple	6018	8195	10641	12771	15206	18015	21294	25170	29821
	Multiple	4635	6312	7732	9114	10634	12315	14183	16272	18621	21285	24329
	Min. Bearing	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1	9.5 / 16.3	11.3 / 18.8	13.3 / 21.5	15.8 / 24.6	18.8 / 28.1	22.5 / 32.1
8	Simple	3377	4600	6012	7612	9402	11139	12761	14554	16547	18775	21281
	Multiple	2599	3541	4628	5861	7079	8057	9104	10230	11442	12752	14171
	Min. Bearing	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5	7.9 / 14.2	9 / 16.1	10.3 / 18.1	11.7 / 20.2	13.2 / 22.5	15 / 25
10	Simple	2154	2936	3838	4862	5996	7189	8485	9882	11379	12752	14171
	Multiple	1656	2258	2953	3741	4615	5534	6532	7454	8251	9095	9988
	Min. Bearing	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2	6.4 / 12.2	7.5 / 14.4	8.7 / 16.5	10 / 18.2	11.3 / 20.1	12.5 / 22.1
12	Simple	1490	2032	2658	3336	4078	4891	5774	6725	7745	8833	9988
	Multiple	1144	1561	2043	2565	3136	3762	4442	5174	5960	6798	7688
	Min. Bearing	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.5 / 6.8	4.3 / 8.4	5.2 / 10	6.1 / 11.8	7.1 / 13.8	8.2 / 15.8	9.4 / 18.1	10.6 / 20.4
14	Simple	1014	1487	1921	2405	2942	3529	4166	4854	5591	6377	7212
	Multiple	836	1141	1475	1848	2260	2712	3203	3732	4299	4905	5548
	Min. Bearing	1.5 / 3	1.9 / 3.6	2.4 / 4.6	3 / 5.8	3.7 / 7.1	4.4 / 8.5	5.2 / 10	6 / 11.6	6.9 / 13.4	7.9 / 15.2	8.9 / 17.2
16	Simple	673	1077	1445	1810	2215	2657	3138	3657	4213	4806	5436
	Multiple	635	857	1108	1389	1700	2040	2410	2809	3237	3694	4178
	Min. Bearing	1.5 / 3	1.5 / 3.1	2.1 / 4	2.6 / 5	3.2 / 6.1	3.8 / 7.3	4.5 / 8.6	5.2 / 10	6 / 11.5	6.8 / 13.2	7.7 / 14.9
18	Simple	467	750	1123	1407	1722	2067	2442	2846	3280	3742	4234
	Multiple	493	664	859	1078	1320	1586	1874	2185	2518	2874	3252
	Min. Bearing	1.5 / 3	1.5 / 3	1.8 / 3.5	2.3 / 4.4	2.8 / 5.3	3.3 / 6.4	3.9 / 7.6	4.6 / 8.8	5.3 / 10.1	6 / 11.6	6.8 / 13.1
20	Simple	335	540	814	1122	1374	1650	1950	2273	2620	2990	3383
	Multiple	391	528	684	858	1052	1264	1494	1743	2009	2294	2596
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3.1	2 / 3.9	2.5 / 4.8	3 / 5.7	3.5 / 6.7	4.1 / 7.8	4.7 / 9	5.3 / 10.3	6 / 11.6
22	Simple	247	400	606	870	1119	1344	1589	1853	2137	2439	2760
	Multiple	317	428	555	698	855	1028	1216	1419	1637	1869	2116
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.5	2.2 / 4.3	2.7 / 5.1	3.1 / 6.1	3.7 / 7.1	4.2 / 8.1	4.8 / 9.3	5.4 / 10.5
24	Simple	186	303	461	663	918	1114	1317	1537	1772	2024	2291
	Multiple	251	353	458	576	707	851	1007	1175	1356	1549	1754
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	2 / 3.9	2.4 / 4.7	2.9 / 5.5	3.3 / 6.4	3.8 / 7.4	4.4 / 8.4	4.9 / 9.5
26	Simple	142	234	357	516	715	936	1108	1293	1491	1703	1928
	Multiple	193	295	383	483	593	714	845	987	1139	1302	1475
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.6	2.2 / 4.3	2.6 / 5	3 / 5.9	3.5 / 6.8	4 / 7.7	4.5 / 8.7
28	Simple	110	183	281	407	566	761	942	1100	1270	1451	1643
	Multiple	151	247	324	409	503	606	718	839	969	1107	1255
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2 / 3.9	2.4 / 4.7	2.8 / 5.4	3.2 / 6.2	3.7 / 7.1	4.2 / 8
30	Simple	86	144	223	326	454	612	802	946	1093	1249	1415
	Multiple	119	197	277	350	431	519	616	720	832	952	1079
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.7	2.2 / 4.3	2.6 / 5	3 / 5.8	3.4 / 6.6	3.9 / 7.4
32	Simple	67	115	180	263	369	498	654	821	948	1084	1229
	Multiple	95	158	239	302	372	449	533	623	721	825	936
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.9 / 4	2.4 / 4.7	2.8 / 5.4	3.2 / 6.1	3.6 / 6.9
34	Simple	53	92	145	215	302	409	539	692	830	949	1076
	Multiple	76	128	199	262	324	391	465	544	629	721	818
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 3.8	2.2 / 4.4	2.6 / 5	3 / 5.7	3.4 / 6.5
36	Simple	42	74	119	176	249	339	448	577	727	836	948
	Multiple	61	105	164	229	284	343	408	478	553	634	719
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2 / 4.1	2.4 / 4.7	2.8 / 5.4	3.2 / 6.1
38	Simple	-	60	97	146	207	283	375	484	612	741	841
	Multiple	-	86	136	201	250	302	360	422	489	560	637
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.8 / 3.9	2.2 / 4.5	2.6 / 5.1	3 / 5.7
40	Simple	-	48	79	121	173	238	316	409	518	644	750
	Multiple	-	70	113	168	221	268	319	375	434	498	566
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.6 / 3.7	2 / 4.2	2.4 / 4.8	2.8 / 5.4

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load equal to 0.75 of total load, for greater live/total applications (e.g. 50 psf snow or higher), analyze specific application with BC CALC® software.
- Span is measured center to center of the supports.

- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Industrial Appearance Headers 3 1/2" and 5 1/2" Roof Load Tables – 115% Snow

		24F-V4 Grade – 115% Load Duration In pounds per lineal foot (PLF)												
Span [ft]	Span Type	3 1/2"								5 1/2"				
		4.5"	6"	7.5"	9"	10.5"	12"	13.5"	15"	9"	10.5"	12"	13.5"	15"
6	Simple	600	1068	1671	2407	3278	4256	5108	6082	3783	5151	6688	8027	9558
	Multiple	462	822	1286	1854	2525	3093	3646	4254	2913	3968	4860	5729	6684
	Min. Bearing	1.5 / 3	1.5 / 3	2.2 / 4.3	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1	3.2 / 6.1	4.3 / 8.4	5.6 / 10.2	6.8 / 12.1	8 / 14.1
8	Simple	273	599	937	1351	1840	2405	3045	3761	2123	2892	3779	4785	5910
	Multiple	258	460	721	1039	1416	1851	2345	2832	1633	2226	2909	3684	4450
	Min. Bearing	1.5 / 3	1.5 / 3	1.7 / 3.2	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5	2.4 / 4.6	3.3 / 6.3	4.2 / 8.2	5.4 / 10.4	6.6 / 12.5
10	Simple	138	331	597	862	1174	1535	1945	2402	1354	1846	2413	3056	3775
	Multiple	164	293	459	663	903	1181	1496	1849	1041	1419	1856	2351	2905
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2	1.9 / 3.7	2.6 / 5	3.4 / 6.5	4.3 / 8.3	5.3 / 10.2
12	Simple	78	189	373	596	813	1063	1347	1664	937	1277	1671	2117	2615
	Multiple	104	202	317	458	625	817	1036	1280	719	981	1284	1627	2011
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.6 / 6.9	4.4 / 8.5	1.6 / 3.1	2.2 / 4.2	2.8 / 5.5	3.6 / 6.9	4.4 / 8.5
14	Simple	48	117	233	406	595	778	987	1219	637	935	1223	1550	1916
	Multiple	64	147	231	334	456	598	758	937	525	717	939	1191	1472
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.9 / 3.6	2.4 / 4.7	3.1 / 5.9	3.8 / 7.3	1.5 / 3	1.9 / 3.6	2.4 / 4.7	3.1 / 5.9	3.8 / 7.3
16	Simple	-	77	154	269	431	594	753	931	423	677	933	1183	1459
	Multiple	-	103	175	254	347	455	578	714	399	546	715	908	1120
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	2.1 / 4.1	2.7 / 5.2	3.3 / 6.4	1.5 / 3	1.5 / 3.1	2.1 / 4.1	2.7 / 5.2	3.3 / 6.4
18	Simple	-	53	106	187	300	451	592	733	294	471	708	927	1135
	Multiple	-	71	137	199	273	358	454	562	313	428	562	711	870
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 3.6	2.4 / 4.6	2.9 / 5.7	1.5 / 3	1.5 / 3	1.8 / 3.6	2.4 / 4.6	2.9 / 5.6
20	Simple	-	-	76	134	216	326	467	591	211	340	512	734	906
	Multiple	-	-	102	160	219	288	365	453	251	344	451	566	694
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2.1 / 4.1	2.7 / 5.1	1.5 / 3	1.5 / 3	1.5 / 3.3	2.1 / 4.1	2.6 / 5
22	Simple	-	-	55	99	160	242	348	480	155	252	381	547	738
	Multiple	-	-	75	131	180	236	300	372	206	282	366	460	564
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.8	2.4 / 4.6	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.7	2.3 / 4.5
24	Simple	-	-	41	74	121	184	265	367	117	191	290	417	577
	Multiple	-	-	56	100	149	197	250	310	158	233	302	380	467
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2 / 4.3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	2 / 4.1
26	Simple	-	-	-	57	94	143	206	286	89	147	224	324	449
	Multiple	-	-	-	77	126	166	212	261	121	195	253	319	391
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 3.9	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.7 / 3.7
28	Simple	-	-	-	44	73	112	163	226	69	115	176	256	356
	Multiple	-	-	-	60	99	142	180	222	95	156	214	270	332
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4
30	Simple	-	-	-	-	58	89	130	182	54	91	140	205	286
	Multiple	-	-	-	-	79	121	155	190	75	124	183	231	285
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2
32	Simple	-	-	-	-	46	72	105	147	42	72	113	165	232
	Multiple	-	-	-	-	63	98	133	164	59	100	154	200	246
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3
34	Simple	-	-	-	-	-	58	86	121	-	58	91	135	190
	Multiple	-	-	-	-	-	80	116	143	-	81	125	174	214
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3
36	Simple	-	-	-	-	-	47	71	100	-	47	74	111	157
	Multiple	-	-	-	-	-	66	96	126	-	66	103	151	188
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3
38	Simple	-	-	-	-	-	-	58	83	-	-	61	92	130
	Multiple	-	-	-	-	-	-	80	111	-	-	85	126	165
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3	-	-	1.5 / 3	1.5 / 3	1.5 / 3
40	Simple	-	-	-	-	-	-	48	69	-	-	50	76	109
	Multiple	-	-	-	-	-	-	67	95	-	-	71	106	146
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3	-	-	1.5 / 3	1.5 / 3	1.5 / 3

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load equal to 0.75 of total load, for greater live/total applications (e.g. 50 psf snow or higher), analyze specific application with BC CALC® software.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 3 1/8" Roof Load Tables – 125% Non-Snow

24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)

Span [ft]	Span Type	24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)								
		6"	7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"
6	Simple	1037	1622	2337	3182	4132	4958	5904	6995	
	Multiple	798	1249	1800	2451	3002	3539	4129	4782	
	Min. Bearing	1.5 / 3	2.4 / 4.6	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	10.3 / 17.7	
8	Simple	581	910	1312	1786	2335	2956	3651	4325	4955
	Multiple	447	700	1009	1375	1798	2276	2749	3129	3535
	Min. Bearing	1.5 / 3	1.8 / 3.5	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	8.5 / 15.5	9.8 / 17.5
10	Simple	295	580	837	1140	1491	1888	2332	2823	3361
	Multiple	285	446	644	877	1147	1453	1795	2174	2588
	Min. Bearing	1.5 / 3	1.5 / 3	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	7 / 13.5	8.3 / 16
12	Simple	169	333	579	790	1033	1308	1616	1957	2330
	Multiple	196	308	445	607	794	1006	1243	1506	1793
	Min. Bearing	1.5 / 3	1.5 / 3	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.5	4.8 / 9.3	5.8 / 11.2	6.9 / 13.3
14	Simple	105	208	362	578	756	958	1184	1434	1708
	Multiple	139	225	325	444	581	736	910	1103	1314
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	2 / 3.9	2.6 / 5.1	3.3 / 6.4	4.1 / 7.9	5 / 9.6	5.9 / 11.4
16	Simple	69	137	240	385	577	731	904	1095	1305
	Multiple	92	171	247	338	443	561	694	841	1003
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.3 / 4.4	2.9 / 5.6	3.6 / 6.9	4.4 / 8.4	5.2 / 10
18	Simple	47	95	167	268	402	576	712	863	1028
	Multiple	63	126	194	265	348	441	546	662	789
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4	2.6 / 5	3.2 / 6.2	3.9 / 7.5	4.6 / 8.9
20	Simple	-	68	120	193	291	417	575	696	830
	Multiple	-	91	156	213	280	356	440	534	637
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2.1 / 4.5	2.9 / 5.6	3.5 / 6.7	4.2 / 8
22	Simple	-	49	88	143	216	311	429	573	684
	Multiple	-	67	118	175	230	292	362	439	524
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 4.1	2.4 / 5.1	3.2 / 6.1	3.8 / 7.3
24	Simple	-	-	66	108	164	237	328	439	570
	Multiple	-	-	89	145	192	244	302	367	436
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.8	2 / 4.6	2.7 / 5.6	3.4 / 6.6
26	Simple	-	-	51	84	127	184	255	342	447
	Multiple	-	-	69	112	162	206	256	310	366
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.7 / 4.3	2.3 / 5.2	2.9 / 6.1
28	Simple	-	-	-	65	100	145	202	272	355
	Multiple	-	-	-	88	135	176	219	263	312
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 4	2 / 4.8	2.5 / 5.6
30	Simple	-	-	-	52	80	116	162	219	286
	Multiple	-	-	-	70	108	152	188	226	268
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.7	1.7 / 4.4	2.2 / 5.2
32	Simple	-	-	-	-	64	94	132	178	234
	Multiple	-	-	-	-	87	127	162	196	232
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.4	1.5 / 4.1	1.9 / 4.8
34	Simple	-	-	-	-	52	77	108	146	192
	Multiple	-	-	-	-	71	104	142	171	203
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 3.8	1.7 / 4.5
36	Simple	-	-	-	-	-	63	89	121	160
	Multiple	-	-	-	-	-	86	121	150	178
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.6	1.5 / 4.3
38	Simple	-	-	-	-	-	52	74	101	134
	Multiple	-	-	-	-	-	72	101	133	158
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.4	1.5 / 4
40	Simple	-	-	-	-	-	-	62	85	113
	Multiple	-	-	-	-	-	-	85	116	140
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3.2	1.5 / 3.8

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load no greater than 0.75 of total load.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.

- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 5 1/8" Roof Load Tables – 125% Non-Snow

Span [ft]	24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)													
	Span Type	6"	7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
6	Simple	1701	2660	3833	5219	6776	8132	9682	11471					
	Multiple	1309	2048	2952	4020	4924	5804	6772	7842					
	Min. Bearing	1.5 / 3	2.4 / 4.6	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	10.3 / 17.7					
8	Simple	953	1492	2151	2930	3829	4848	5987	7093	8126	9268			
	Multiple	733	1148	1655	2255	2948	3733	4508	5131	5798	6515			
	Min. Bearing	1.5 / 3	1.8 / 3.5	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	8.5 / 15.5	9.8 / 17.5	11.2 / 19.6			
10	Simple	485	952	1373	1870	2445	3097	3825	4630	5513	6472	7287		
	Multiple	467	731	1055	1439	1881	2383	2944	3565	4244	4748	5255		
	Min. Bearing	1.5 / 3	1.5 / 3	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	7 / 13.5	8.3 / 16	9.7 / 17.9	11 / 19.8		
12	Simple	277	547	950	1295	1693	2145	2651	3209	3821	4487	5206	5937	
	Multiple	322	505	730	995	1302	1650	2039	2469	2940	3453	4007	4499	
	Min. Bearing	1.5 / 3	1.5 / 3	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.5	4.8 / 9.3	5.8 / 11.2	6.9 / 13.3	8.1 / 15.7	9.4 / 18.2	10.7 / 20.4	
14	Simple	172	341	594	948	1240	1572	1942	2352	2802	3264	3759	4287	4848
	Multiple	228	369	533	728	953	1208	1493	1809	2154	2510	2891	3298	3730
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	2 / 3.9	2.6 / 5.1	3.3 / 6.4	4.1 / 7.9	5 / 9.6	5.9 / 11.4	6.9 / 13.3	8 / 15.3	9.1 / 17.5	10.3 / 19.8
16	Simple	113	225	394	631	946	1199	1483	1788	2111	2460	2833	3232	3655
	Multiple	151	280	405	554	726	921	1139	1373	1622	1890	2178	2485	2811
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.3 / 4.4	2.9 / 5.6	3.6 / 6.9	4.3 / 8.4	5.1 / 9.9	6 / 11.5	6.9 / 13.2	7.8 / 15.1	8.9 / 17.1
18	Simple	77	155	274	439	660	944	1160	1392	1644	1915	2207	2518	2848
	Multiple	103	207	318	435	570	724	889	1068	1262	1471	1695	1934	2188
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4	2.6 / 5	3.2 / 6.1	3.8 / 7.4	4.5 / 8.7	5.2 / 10.1	6 / 11.6	6.9 / 13.3	7.8 / 15
20	Simple	54	111	196	317	477	684	926	1111	1313	1530	1763	2012	2277
	Multiple	73	149	255	350	459	579	709	852	1007	1174	1353	1545	1748
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2.1 / 4.5	2.8 / 5.5	3.4 / 6.5	4 / 7.7	4.7 / 9	5.4 / 10.4	6.1 / 11.8	6.9 / 13.3
22	Simple	-	81	145	235	355	509	703	906	1071	1248	1439	1642	1858
	Multiple	-	109	194	287	375	471	577	694	820	957	1103	1259	1426
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 4	2.4 / 4.9	3.1 / 5.9	3.6 / 7	4.2 / 8.1	4.8 / 9.3	5.5 / 10.6	6.2 / 12
24	Simple	-	60	109	178	270	389	537	720	888	1036	1194	1363	1543
	Multiple	-	82	147	238	310	389	478	574	679	793	915	1044	1182
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.7	2 / 4.5	2.7 / 5.4	3.3 / 6.3	3.8 / 7.4	4.4 / 8.5	5 / 9.7	5.7 / 10.9
26	Simple	-	45	83	137	209	302	419	562	733	872	1005	1148	1300
	Multiple	-	63	113	184	260	327	401	482	571	666	769	878	995
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.7 / 4.1	2.3 / 4.9	2.9 / 5.8	3.5 / 6.7	4 / 7.8	4.6 / 8.8	5.2 / 10
28	Simple	-	-	64	107	164	238	332	446	583	743	857	979	1108
	Multiple	-	-	88	145	220	277	340	410	485	567	654	748	847
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.8	2 / 4.5	2.5 / 5.3	3.2 / 6.2	3.7 / 7.2	4.2 / 8.2	4.8 / 9.2
30	Simple	-	-	50	85	131	191	266	358	470	601	738	843	954
	Multiple	-	-	70	115	177	237	292	352	417	487	563	643	729
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.7 / 4.2	2.2 / 4.9	2.8 / 5.8	3.4 / 6.6	3.9 / 7.6	4.4 / 8.5
32	Simple	-	-	-	67	105	154	216	292	383	491	618	732	830
	Multiple	-	-	-	93	143	205	253	305	361	422	488	558	633
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.5 / 3.9	1.9 / 4.6	2.5 / 5.4	3.1 / 6.2	3.7 / 7	4.1 / 8
34	Simple	-	-	-	54	85	126	177	240	316	405	511	632	727
	Multiple	-	-	-	75	117	171	220	266	315	369	427	488	554
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.7	1.7 / 4.3	2.2 / 5	2.7 / 5.8	3.4 / 6.6	3.9 / 7.4
36	Simple	-	-	-	-	69	103	146	199	262	338	426	528	641
	Multiple	-	-	-	-	96	141	193	233	277	324	375	430	488
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.5 / 4	2 / 4.7	2.4 / 5.4	3 / 6.2	3.6 / 7
38	Simple	-	-	-	-	57	85	121	166	220	284	358	445	544
	Multiple	-	-	-	-	79	118	166	206	245	287	332	381	432
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 3.8	1.8 / 4.4	2.2 / 5.1	2.7 / 5.8	3.3 / 6.6
40	Simple	-	-	-	-	47	71	101	139	185	240	303	377	462
	Multiple	-	-	-	-	66	98	139	183	218	255	296	339	385
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.6	1.6 / 4.2	2 / 4.8	2.4 / 5.5	3 / 6.2

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load no greater than 0.75 of total load.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 6¾" Roof Load Tables – 125% Non-Snow

24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)

Span [ft]	Span Type	24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)											
		7.5"	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
6	Simple	3503	5048	6873	8924	10710	12752	15109					
	Multiple	2698	3888	5294	6485	7644	8919	10329					
	Min. Bearing	2.4 / 4.6	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	10.3 / 17.7					
8	Simple	1965	2833	3859	5043	6385	7886	9343	10703	12207			
	Multiple	1512	2180	2971	3883	4917	5938	6758	7637	8581			
	Min. Bearing	1.8 / 3.5	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	8.5 / 15.5	9.8 / 17.5	11.2 / 19.6			
10	Simple	1253	1808	2463	3220	4078	5038	6099	7260	8507	9597		
	Multiple	963	1390	1895	2478	3139	3878	4695	5590	6253	6922		
	Min. Bearing	1.5 / 3	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	7 / 13.5	8.3 / 16	9.7 / 17.9	11 / 19.8		
12	Simple	720	1251	1705	2230	2826	3491	4212	4972	5791	6669	7605	8600
	Multiple	665	961	1311	1715	2173	2685	3241	3826	4457	5133	5854	6465
	Min. Bearing	1.5 / 3	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.5	4.8 / 9.3	5.8 / 11.2	6.8 / 13.2	8 / 15.3	9.2 / 17.7	10.5 / 20.1	11.8 / 22.2
14	Simple	449	782	1248	1633	2070	2534	3040	3589	4181	4815	5492	6211
	Multiple	485	702	958	1255	1591	1948	2337	2760	3215	3704	4225	4778
	Min. Bearing	1.5 / 3	1.5 / 3	2 / 3.9	2.6 / 5.1	3.3 / 6.4	4.1 / 7.9	4.9 / 9.4	5.8 / 11.1	6.7 / 13	7.7 / 14.9	8.8 / 17	10 / 19.2
16	Simple	297	519	831	1245	1560	1909	2290	2704	3151	3629	4140	4682
	Multiple	369	534	730	956	1198	1466	1759	2078	2421	2790	3183	3600
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3.4	2.3 / 4.4	2.9 / 5.6	3.5 / 6.8	4.2 / 8.1	5 / 9.6	5.8 / 11.2	6.7 / 12.9	7.6 / 14.7	8.6 / 16.6
18	Simple	205	360	578	869	1214	1485	1782	2105	2453	2826	3225	3648
	Multiple	273	419	573	742	930	1139	1368	1616	1884	2171	2477	2803
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 3.9	2.5 / 4.9	3.1 / 6	3.7 / 7.2	4.4 / 8.4	5.1 / 9.8	5.9 / 11.3	6.7 / 12.9	7.6 / 14.6
20	Simple	146	259	417	628	900	1185	1423	1681	1960	2259	2577	2916
	Multiple	196	336	456	591	741	908	1091	1289	1503	1733	1978	2239
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2.1 / 4.4	2.8 / 5.3	3.3 / 6.4	3.9 / 7.5	4.5 / 8.7	5.2 / 10.1	6 / 11.5	6.7 / 13
22	Simple	107	191	309	467	671	926	1160	1371	1599	1843	2103	2380
	Multiple	144	255	370	480	603	739	888	1050	1225	1412	1613	1825
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.7 / 3.9	2.4 / 4.8	3 / 5.7	3.5 / 6.8	4.1 / 7.9	4.7 / 9.1	5.4 / 10.3	6.1 / 11.7
24	Simple	79	143	234	355	512	708	948	1137	1326	1529	1746	1976
	Multiple	108	193	306	397	498	611	735	870	1015	1171	1337	1514
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 4.3	2.7 / 5.2	3.2 / 6.1	3.7 / 7.2	4.3 / 8.2	4.9 / 9.4	5.5 / 10.6
26	Simple	60	110	180	275	398	551	740	957	1116	1287	1470	1664
	Multiple	82	149	243	332	418	513	617	731	853	984	1125	1274
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.7 / 4	2.3 / 4.8	2.9 / 5.6	3.4 / 6.6	3.9 / 7.5	4.5 / 8.6	5 / 9.7
28	Simple	45	85	141	216	314	437	587	767	951	1097	1253	1419
	Multiple	64	116	191	281	354	436	524	621	725	838	957	1084
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.7	2 / 4.4	2.5 / 5.2	3.1 / 6	3.6 / 7	4.1 / 7.9	4.7 / 9
30	Simple	-	66	111	172	251	350	472	618	792	944	1079	1222
	Multiple	-	92	152	233	304	373	450	533	623	720	823	933
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.7 / 4.1	2.2 / 4.8	2.8 / 5.6	3.3 / 6.4	3.8 / 7.4	4.3 / 8.3
32	Simple	-	52	89	139	203	284	384	504	647	813	937	1062
	Multiple	-	73	122	188	262	323	390	462	540	624	714	810
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 3.8	1.9 / 4.5	2.5 / 5.2	3.1 / 6	3.6 / 6.8	4 / 7.7
34	Simple	-	-	71	112	166	233	316	416	534	672	821	930
	Multiple	-	-	99	154	225	281	340	403	472	546	624	708
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	1.7 / 4.2	2.2 / 4.9	2.7 / 5.6	3.3 / 6.4	3.8 / 7.2
36	Simple	-	-	57	91	136	192	262	345	445	561	696	821
	Multiple	-	-	81	126	186	247	298	354	415	480	550	624
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.5 / 3.9	2 / 4.6	2.4 / 5.3	3 / 6	3.5 / 6.8
38	Simple	-	-	46	75	112	160	219	289	373	472	586	716
	Multiple	-	-	66	105	155	218	263	313	367	425	487	552
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.7	1.8 / 4.3	2.2 / 5	2.7 / 5.7	3.3 / 6.4
40	Simple	-	-	-	61	93	134	183	244	316	400	497	609
	Multiple	-	-	-	87	130	183	234	278	326	378	433	492
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.6 / 4.1	2 / 4.7	2.4 / 5.4	3 / 6.1

- Both Architectural and Industrial appearance grade BOISE GLULAMS have the same structural grade, 24F-V4. Appearance grade does not affect the beam's load capacity.
- Uniform PLF load values are limited by shear, moment, total load deflection limited to L/180 and live load deflection limited to L/240.
- Live load no greater than 0.75 of total load.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Architectural Appearance Beams 8^{3/4}" Roof Load Tables – 125% Non-Snow

Span [ft]	24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)											
	Span Type	9"	10.5"	12"	13.5"	15"	16.5"	18"	19.5"	21"	22.5"	24"
6	Simple	6543	8910	11568	13884	16531	19585	23149	27362	32418	38598	46324
	Multiple	5039	6863	8406	9909	11562	13389	15420	17690	20244	23140	26449
	Min. Bearing	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	10.3 / 17.7	12.2 / 20.4	14.5 / 23.4	17.1 / 26.8	20.4 / 30.6	24.5 / 34.9
8	Simple	3672	5002	6537	8277	10222	12111	13874	15824	17990	20412	23136
	Multiple	2826	3851	5033	6374	7697	8760	9899	11123	12441	13865	15407
	Min. Bearing	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	8.5 / 15.5	9.8 / 17.5	11.2 / 19.6	12.7 / 22	14.4 / 24.5	16.3 / 27.2
10	Simple	2343	3193	4174	5287	6520	7818	9226	10745	12372	13865	15407
	Multiple	1802	2456	3212	4069	5019	6018	7103	8105	8973	9890	10861
	Min. Bearing	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	6.9 / 13.3	8.1 / 15.7	9.5 / 17.9	10.9 / 19.8	12.2 / 21.8	13.6 / 24
12	Simple	1621	2211	2891	3628	4436	5320	6279	7313	8422	9605	10861
	Multiple	1246	1699	2223	2790	3412	4092	4831	5628	6482	7393	8361
	Min. Bearing	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.4	4.7 / 9.1	5.6 / 10.9	6.7 / 12.8	7.8 / 15	8.9 / 17.2	10.2 / 19.6	11.5 / 22.2
14	Simple	1014	1618	2090	2617	3200	3839	4532	5280	6081	6936	7844
	Multiple	910	1242	1605	2011	2460	2951	3485	4060	4677	5335	6034
	Min. Bearing	1.5 / 3	2 / 3.9	2.6 / 5	3.3 / 6.3	4 / 7.7	4.8 / 9.2	5.6 / 10.8	6.5 / 12.6	7.5 / 14.5	8.6 / 16.6	9.7 / 18.7
16	Simple	673	1077	1573	1970	2410	2892	3414	3978	4583	5228	5913
	Multiple	692	933	1206	1512	1850	2221	2623	3057	3522	4019	4546
	Min. Bearing	1.5 / 3	1.5 / 3.4	2.2 / 4.3	2.8 / 5.4	3.4 / 6.6	4.1 / 7.9	4.9 / 9.4	5.7 / 10.9	6.5 / 12.5	7.4 / 14.3	8.4 / 16.2
18	Simple	467	750	1127	1532	1875	2250	2658	3098	3569	4072	4606
	Multiple	538	724	936	1174	1438	1726	2040	2378	2741	3128	3539
	Min. Bearing	1.5 / 3	1.5 / 3	1.8 / 3.8	2.5 / 4.8	3 / 5.8	3.6 / 7	4.3 / 8.2	5 / 9.6	5.7 / 11	6.5 / 12.6	7.4 / 14.2
20	Simple	335	540	814	1167	1496	1797	2123	2474	2852	3254	3682
	Multiple	427	576	745	936	1146	1377	1627	1898	2188	2497	2826
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3.4	2.1 / 4.2	2.7 / 5.2	3.2 / 6.2	3.8 / 7.3	4.4 / 8.5	5.1 / 9.8	5.8 / 11.2	6.6 / 12.6
22	Simple	247	400	606	870	1201	1464	1731	2018	2326	2655	3005
	Multiple	331	467	606	761	932	1121	1325	1546	1783	2036	2304
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3.1	1.7 / 3.8	2.4 / 4.7	2.9 / 5.6	3.4 / 6.6	4 / 7.7	4.6 / 8.8	5.2 / 10.1	5.9 / 11.4
24	Simple	186	303	461	663	918	1214	1435	1674	1930	2204	2494
	Multiple	251	386	500	629	771	928	1098	1281	1478	1688	1911
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2 / 4.2	2.6 / 5.1	3.1 / 6	3.6 / 7	4.2 / 8	4.8 / 9.2	5.4 / 10.3
26	Simple	142	234	357	516	715	959	1207	1409	1625	1855	2101
	Multiple	193	315	419	527	647	779	922	1076	1242	1419	1607
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 3.9	2.3 / 4.7	2.8 / 5.5	3.3 / 6.4	3.8 / 7.4	4.4 / 8.4	4.9 / 9.5
28	Simple	110	183	281	407	566	761	995	1200	1384	1581	1790
	Multiple	151	247	355	447	549	661	783	915	1057	1208	1368
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 4.3	2.5 / 5.1	3.1 / 5.9	3.5 / 6.8	4 / 7.7	4.5 / 8.7
30	Simple	86	144	223	326	454	612	802	1027	1191	1361	1542
	Multiple	119	197	302	383	471	567	673	786	908	1038	1177
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.7 / 4	2.2 / 4.7	2.8 / 5.5	3.3 / 6.3	3.7 / 7.2	4.2 / 8.1
32	Simple	67	115	180	263	369	498	654	839	1035	1183	1340
	Multiple	95	158	244	331	407	491	583	681	787	901	1021
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.7	1.9 / 4.4	2.5 / 5.1	3 / 5.9	3.5 / 6.7	3.9 / 7.5
34	Simple	53	92	145	215	302	409	539	692	872	1036	1174
	Multiple	76	128	199	288	355	428	508	595	688	787	893
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.7 / 4.1	2.2 / 4.8	2.7 / 5.5	3.2 / 6.2	3.7 / 7.1
36	Simple	42	74	119	176	249	339	448	577	727	902	1035
	Multiple	61	105	164	241	311	376	446	523	605	693	786
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.5 / 3.8	2 / 4.5	2.4 / 5.1	3 / 5.9	3.4 / 6.6
38	Simple	-	60	97	146	207	283	375	484	612	759	919
	Multiple	-	86	136	201	274	332	394	462	535	613	696
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.6	1.8 / 4.2	2.2 / 4.8	2.7 / 5.5	3.2 / 6.2
40	Simple	-	48	79	121	173	238	316	409	518	644	789
	Multiple	-	70	113	168	238	294	350	411	476	546	620
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.6 / 4	2 / 4.6	2.4 / 5.2	3 / 5.9

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- Live load no greater than 0.75 of total load.
- Span is measured center to center of the supports.
- Table values assume that lateral support is provided at each support and continuously along the compression edge of the beam.
- Table values for Minimum Required Bearing Lengths are based on the allowable compression design value perpendicular to grain for the beam and the load value shown. Other design considerations, such as a weaker support material, may warrant longer bearing lengths. Table values assume that support is provided across the full width of the beam.
- This table was designed to apply to a broad range of applications. It may be possible to exceed the limitations of this table by analyzing a specific application with the BC CALC® software.

BOISE GLULAM® Beams Roof Load Tables

Industrial Appearance Headers 3 1/2" and 5 1/2" Roof Load Tables – 125% Non-Snow

		24F-V4 Grade – 125% Load Duration In pounds per lineal foot (PLF)													
Span [ft]	Span Type	3 1/2"								5 1/2"					
		4.5"	6"	7.5"	9"	10.5"	12"	13.5"	15"	9"	10.5"	12"	13.5"	15"	
6	Simple	652	1162	1817	2617	3564	4627	5554	6612	4113	5601	7271	8727	10391	
	Multiple	502	894	1399	2016	2745	3363	3964	4625	3168	4314	5284	6228	7267	
	Min. Bearing	1.5 / 3	1.5 / 3	2.4 / 4.6	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	3.5 / 6.7	4.7 / 9.1	6.1 / 11.1	7.3 / 13.1	8.7 / 15.3	
8	Simple	273	651	1019	1469	2001	2615	3311	4089	2308	3144	4109	5203	6425	
	Multiple	281	501	784	1131	1540	2013	2549	3079	1777	2420	3164	4006	4838	
	Min. Bearing	1.5 / 3	1.5 / 3	1.8 / 3.5	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	2.6 / 5	3.5 / 6.8	4.6 / 8.9	5.8 / 11.3	7.2 / 13.6	
10	Simple	138	331	650	937	1277	1670	2115	2612	1473	2007	2624	3323	4105	
	Multiple	178	319	499	721	983	1285	1627	2011	1133	1544	2019	2557	3160	
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	2.1 / 4	2.8 / 5.4	3.7 / 7.1	4.7 / 9	5.8 / 11.1	
12	Simple	78	189	373	649	884	1156	1465	1810	1019	1390	1817	2302	2845	
	Multiple	104	220	345	498	680	889	1127	1392	783	1068	1397	1771	2188	
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.5	4.8 / 9.3	1.7 / 3.3	2.4 / 4.5	3.1 / 5.9	3.9 / 7.5	4.8 / 9.3	
14	Simple	48	117	233	406	647	847	1073	1327	637	1017	1331	1687	2085	
	Multiple	64	156	252	364	497	651	825	1020	572	781	1022	1296	1602	
	Min. Bearing	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	2 / 3.9	2.6 / 5.1	3.3 / 6.4	4.1 / 7.9	1.5 / 3	2 / 3.9	2.6 / 5.1	3.3 / 6.4	4.1 / 7.9	
16	Simple	-	77	154	269	431	646	819	1013	423	677	1015	1287	1588	
	Multiple	-	103	191	277	378	496	629	778	435	595	779	988	1219	
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.3 / 4.4	2.9 / 5.6	3.6 / 6.9	1.5 / 3	1.5 / 3.4	2.3 / 4.4	2.9 / 5.6	3.6 / 6.9	
18	Simple	-	53	106	187	300	451	645	797	294	471	708	1010	1235	
	Multiple	-	71	142	217	297	389	494	612	341	467	612	774	948	
	Min. Bearing	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4	2.6 / 5	3.2 / 6.2	1.5 / 3	1.5 / 3	1.8 / 4	2.6 / 5	3.2 / 6.1	
20	Simple	-	-	76	134	216	326	467	643	211	340	512	734	986	
	Multiple	-	-	102	174	239	314	398	493	274	375	492	617	756	
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2.1 / 4.5	2.9 / 5.6	1.5 / 3	1.5 / 3	1.5 / 3.5	2.1 / 4.4	2.8 / 5.4	
22	Simple	-	-	55	99	160	242	348	480	155	252	381	547	755	
	Multiple	-	-	75	132	196	257	327	405	208	308	400	502	615	
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 4.1	2.4 / 5.1	1.5 / 3	1.5 / 3	1.5 / 3.2	1.7 / 4	2.4 / 4.9	
24	Simple	-	-	41	74	121	184	265	367	117	191	290	417	577	
	Multiple	-	-	56	100	162	215	273	339	158	255	330	415	509	
	Min. Bearing	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.8	2 / 4.6	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 4.4	
26	Simple	-	-	-	57	94	143	206	286	89	147	224	324	449	
	Multiple	-	-	-	77	126	181	231	285	121	198	277	348	427	
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	1.7 / 4.3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.7 / 4.1	
28	Simple	-	-	-	44	73	112	163	226	69	115	176	256	356	
	Multiple	-	-	-	60	99	151	197	242	95	156	234	295	363	
	Min. Bearing	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	1.5 / 3.9	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.1	1.5 / 3.7	
30	Simple	-	-	-	-	58	89	130	182	54	91	140	205	286	
	Multiple	-	-	-	-	79	121	169	208	75	124	190	253	311	
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.6	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	
32	Simple	-	-	-	-	46	72	105	147	42	72	113	165	232	
	Multiple	-	-	-	-	63	98	142	180	59	100	154	219	269	
	Min. Bearing	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.2	
34	Simple	-	-	-	-	-	58	86	121	-	58	91	135	190	
	Multiple	-	-	-	-	-	80	117	157	-	81	125	183	234	
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3.2	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	
36	Simple	-	-	-	-	-	47	71	100	-	47	74	111	157	
	Multiple	-	-	-	-	-	66	96	135	-	66	103	151	206	
	Min. Bearing	-	-	-	-	-	1.5 / 3	1.5 / 3	1.5 / 3	-	1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	
38	Simple	-	-	-	-	-	-	58	83	-	-	61	92	130	
	Multiple	-	-	-	-	-	-	80	113	-	-	85	126	178	
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3	-	-	1.5 / 3	1.5 / 3	1.5 / 3	
40	Simple	-	-	-	-	-	-	48	69	-	-	50	76	109	
	Multiple	-	-	-	-	-	-	67	95	-	-	71	106	149	
	Min. Bearing	-	-	-	-	-	-	1.5 / 3	1.5 / 3	-	-	1.5 / 3	1.5 / 3	1.5 / 3	

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