Allowable Uniform Loads

1.6E Beam–Floor 100%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT

ONE x 1¾" 1.6E PWLVL

Span (ft)	Key	3½"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"
6	LL	64	250	572	-	-	-	-	-
	TL	95	372	615	829	857	1068	1149	1448
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.5	1.9 / 4.8	2 / 4.9	2.5 / 6.1	2.6 / 6.6	3.3 / 8.3
7	LL	41	157	360	-	-	-	-	-
	TL	53	208	479	684	707	873	936	1165
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.2	1.8 / 4.6	1.9 / 4.7	2.3 / 5.9	2.5 / 6.3	3.1 / 7.8
8	LL		105	241	501	543	-	-	-
	TL		121	279	583	601	738	789	974
	BRG		1.5 / 3	1.5 / 3	1.8 / 4.5	1.8 / 4.6	2.3 / 5.7	2.4 / 6.1	3 / 7.5
9	LL		74	169	352	381	633	-	-
	TL		75	173	483	506	639	682	836
	BRG		1.5 / 3	1.5 / 3	1.7 / 4.2	1.7 / 4.4	2.2 / 5.5	2.4 / 5.9	2.9 / 7.2
10	LL		-	-	256	278	461	543	-
	TL		48	112	381	409	556	600	733
	BRG		1.5 / 3	1.5 / 3	1.5 / 3.7	1.6 / 3.9	2.1 / 5.3	2.3 / 5.8	2.8 / 7
11	LL		-	-	193	209	347	408	-
	TL		32	76	285	309	458	506	652
	BRG		1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.9 / 4.9	2.1 / 5.4	2.8 / 6.9
12	LL			-	148	161	267	314	515
	TL			53	218	237	384	424	571
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4	2 / 4.9	2.6 / 6.6
13	LL			-	117	126	210	247	405
	TL			37	171	185	310	360	486
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	1.8 / 4.5	2.4 / 6.1
14	LL			-	93	101	168	198	324
	TL			27	136	148	247	291	418
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.6 / 4	2.3 / 5.7
15	LL				76	82	137	161	263
	TL				110	119	200	236	363
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.1 / 5.3
16	LL				63	68	113	132	217
	TL				90	97	164	193	318
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	2 / 4.9
17	LL				52	57	94	110	181
	TL				74	81	136	160	265
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4
18	LL				44	48	79	93	152
	TL				62	67	114	134	222
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9
19	LL					41	67	79	130
	TL					56	96	113	188
	BRG					1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5
20	LL						58	68	111
	TL						81	96	160
	BRG						1.5 / 3	1.5 / 3	1.5 / 3.2
21	LL						50	59	96
	TL						70	83	138
	BRG						1.5 / 3	1.5 / 3	1.5 / 3
22	LL						43	51	84
	TL						60	71	119
	BRG						1.5 / 3	1.5 / 3	1.5 / 3
23	LL							45	73
	TL							62	103
	BRG							1.5 / 3	1.5 / 3
24	LL								64
	TL								90
	BRG								1.5 / 3
25	LL								57
	TL								79
	BRG								1.5 / 3
26	LL								51
	TL								70
	BRG								1.5 / 3
27	LL								45
	TL								61
	BRG								1.5 / 3
28	LL								41
	TL								54
	BRG								1.5 / 3
29	LL								
	TL								
	BRG								
30	LL								
	TL								
	BRG								

* Can be applied to the beam in addition to its own weight.
Simple or multiple beam spans.

2 plies minimum for depths greater than 14 inches.

Wax-based sealer applied to mitigate moisture issues associated with wood products during storage and construction.

Key to Table:

LL = Maximum live load – limits deflection to L/360

TL = Maximum total load – limits deflections to L/240 (or a maximum of 0.3125" for beams 7¼" deep or less)

BRG = Required end / intermediate bearing length (inches), based on bearing stress of 750 psi.

Allowable Uniform Loads

1.6E Beam–Floor 100%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT

TWO x 1¾" 1.6E PWLVL

Span (ft)	Key	3½"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	22"	24"
6	LL	128	500	1144	-	-	-	-	-	-	-	-	-	-
	TL	190	744	1230	1658	1714	2136	2298	2896	3538	4276	5134	6140	7256
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.5	1.9 / 4.8	2 / 4.9	2.5 / 6.1	2.6 / 6.6	3.3 / 8.3	4.1 / 10.2	4.9 / 12.3	5.9 / 14.7	7 / 17.6	8.3 / 20.8
7	LL	82	314	720	-	-	-	-	-	-	-	-	-	-
	TL	106	416	958	1368	1414	1746	1872	2330	2808	3344	3944	4626	5350
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.2	1.8 / 4.6	1.9 / 4.7	2.3 / 5.9	2.5 / 6.3	3.1 / 7.8	3.8 / 9.4	4.5 / 11.2	5.3 / 13.2	6.2 / 15.5	7.2 / 17.9
8	LL		210	482	1002	1086	-	-	-	-	-	-	-	-
	TL		242	558	1166	1202	1476	1578	1948	2328	2744	3202	3708	4234
	BRG		1.5 / 3	1.5 / 3	1.8 / 4.5	1.8 / 4.6	2.3 / 5.7	2.4 / 6.1	3 / 7.5	3.6 / 8.9	4.2 / 10.5	4.9 / 12.3	5.7 / 14.2	6.5 / 16.2
9	LL		148	338	704	762	1266	-	-	-	-	-	-	-
	TL		150	346	966	1012	1278	1364	1672	1986	2326	2694	3094	3502
	BRG		1.5 / 3	1.5 / 3	1.7 / 4.2	1.7 / 4.4	2.2 / 5.5	2.4 / 5.9	2.9 / 7.2	3.4 / 8.6	4 / 10	4.6 / 11.6	5.3 / 13.3	6 / 15.1
10	LL		-	-	512	556	922	1086	-	-	-	-	-	-
	TL		96	224	762	818	1112	1200	1466	1732	2018	2324	2654	2986
	BRG		1.5 / 3	1.5 / 3	1.5 / 3.7	1.6 / 3.9	2.1 / 5.3	2.3 / 5.8	2.8 / 7	3.3 / 8.3	3.9 / 9.7	4.5 / 11.2	5.1 / 12.7	5.7 / 14.3
11	LL		-	-	386	418	694	816	-	-	-	-	-	-
	TL		64	152	570	618	916	1012	1304	1534	1780	2042	2322	2600
	BRG		1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.9 / 4.9	2.1 / 5.4	2.8 / 6.9	3.2 / 8.1	3.8 / 9.4	4.3 / 10.8	4.9 / 12.3	5.5 / 13.7
12	LL			-	296	322	534	628	1030	-	-	-	-	-
	TL			106	436	474	768	848	1142	1378	1594	1822	2064	2304
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4	2 / 4.9	2.6 / 6.6	3.2 / 8	3.7 / 9.2	4.2 / 10.5	4.8 / 11.9	5.3 / 13.3
13	LL			-	234	252	420	494	810	1208	-	-	-	-
	TL			74	342	370	620	720	972	1236	1442	1644	1856	2066
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	1.8 / 4.5	2.4 / 6.1	3.1 / 7.7	3.6 / 9	4.1 / 10.3	4.6 / 11.6	5.2 / 12.9
14	LL			-	186	202	336	396	648	968	-	-	-	-
	TL			54	272	296	494	582	836	1064	1316	1498	1686	1874
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.6 / 4	2.3 / 5.7	2.9 / 7.2	3.6 / 8.9	4 / 10.1	4.5 / 11.4	5.1 / 12.6
15	LL				152	164	274	322	526	786	1120	-	-	-
	TL				220	238	400	472	726	926	1146	1374	1546	1714
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.1 / 5.3	2.7 / 6.7	3.3 / 8.3	4 / 9.9	4.5 / 11.2	5 / 12.4
16	LL				126	136	226	264	434	648	922	-	-	-
	TL				180	194	328	386	636	812	1004	1216	1426	1578
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	2 / 4.9	2.5 / 6.3	3.1 / 7.8	3.8 / 9.4	4.4 / 11	4.9 / 12.2
17	LL				104	114	188	220	362	540	770	1056	-	-
	TL				148	162	272	320	530	718	888	1076	1278	1462
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4	2.4 / 5.9	2.9 / 7.3	3.5 / 8.9	4.2 / 10.5	4.8 / 12
18	LL				88	96	158	186	304	456	648	890	-	-
	TL				124	134	228	268	444	638	790	958	1138	1320
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	2.2 / 5.6	2.8 / 6.9	3.3 / 8.4	4 / 9.9	4.6 / 11.5
19	LL					82	134	158	260	388	552	756	1006	-
	TL					112	192	226	376	566	708	858	1020	1182
	BRG					1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2.1 / 5.3	2.6 / 6.6	3.2 / 7.9	3.8 / 9.4	4.4 / 10.9
20	LL						116	136	222	332	472	648	862	-
	TL						162	192	320	484	638	772	918	1064
	BRG						1.5 / 3	1.5 / 3	1.5 / 3.2	1.9 / 4.7	2.5 / 6.2	3 / 7.5	3.6 / 8.9	4.1 / 10.3
21	LL						100	118	192	286	408	560	746	952
	TL						140	166	276	416	576	698	830	964
	BRG						1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 4.3	2.4 / 5.9	2.9 / 7.2	3.4 / 8.5	3.9 / 9.9
22	LL						86	102	168	250	354	486	648	828
	TL						120	142	238	360	516	634	756	876
	BRG						1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	2.2 / 5.6	2.7 / 6.8	3.3 / 8.1	3.8 / 9.4
23	LL							90	146	218	310	426	568	724
	TL							124	206	312	450	580	690	800
	BRG							1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 5.1	2.6 / 6.6	3.1 / 7.8	3.6 / 9
24	LL								128	192	274	376	500	638
	TL								180	274	394	530	632	732
	BRG								1.5 / 3	1.5 / 3.3	1.9 / 4.7	2.5 / 6.3	3 / 7.5	3.4 / 8.6
25	LL								114	170	242	332	442	564
	TL								158	240	346	480	580	674
	BRG								1.5 / 3	1.5 / 3	1.7 / 4.3	2.4 / 5.9	2.9 / 7.1	3.3 / 8.3
26	LL								102	152	216	296	392	502
	TL								140	212	306	424	534	622
	BRG								1.5 / 3	1.5 / 3	1.6 / 4	2.2 / 5.5	2.7 / 6.9	3.2 / 8
27	LL								90	134	192	264	350	448
	TL								122	188	272	376	494	574
	BRG								1.5 / 3	1.5 / 3	1.5 / 3.7	2 / 5.1	2.6 / 6.6	3.1 / 7.7
28	LL								82	120	172	236	314	402
	TL								108	166	242	336	452	532
	BRG								1.5 / 3	1.5 / 3	1.5 / 3.4	1.9 / 4.7	2.5 / 6.3	3 / 7.4
29	LL									108	154	212	282	362
	TL									148	216	300	404	496
	BRG									1.5 / 3	1.5 / 3.2	1.8 / 4.4	2.3 / 5.9	2.9 / 7.1
30	LL									98	140	192	256	326
	TL									132	194	270	364	462
	BRG									1.5 / 3	1.5 / 3	1.6 / 4.1	2.2 / 5.5	2.8 / 6.9

* Can be applied to the beam in addition to its own weight.
Simple or multiple beam spans.

Key to Table:

LL = Maximum live load – limits deflection to L/360
TL = Maximum total load – limits deflections to L/240 (or a maximum of 0.3125" for beams 7¼" deep or less)
BRG = Required end / intermediate bearing length (inches), based on bearing stress of 750 psi.

Allowable Uniform Loads

1.6E Beam–Floor 100%

ALLOWABLE UNIFORM LOADS* – POUNDS PER LINEAL FOOT

THREE x 1¾" 1.6E PWLVL

Span (ft)	Key	3½"	5½"	7¼"	9¼"	9½"	11¼"	11⅞"	14"	16"	18"	20"	22"	24"
6	LL	192	750	1716	-	-	-	-	-	-	-	-	-	-
	TL	285	1116	1845	2487	2571	3204	3447	4344	5307	6414	7701	9210	10884
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.5	1.9 / 4.8	2 / 4.9	2.5 / 6.1	2.6 / 6.6	3.3 / 8.3	4.1 / 10.2	4.9 / 12.3	5.9 / 14.7	7 / 17.6	8.3 / 20.8
7	LL	123	471	1080	-	-	-	-	-	-	-	-	-	-
	TL	159	624	1437	2052	2121	2619	2808	3495	4212	5016	5916	6939	8025
	BRG	1.5 / 3	1.5 / 3	1.5 / 3.2	1.8 / 4.6	1.9 / 4.7	2.3 / 5.9	2.5 / 6.3	3.1 / 7.8	3.8 / 9.4	4.5 / 11.2	5.3 / 13.2	6.2 / 15.5	7.2 / 17.9
8	LL		315	723	1503	1629	-	-	-	-	-	-	-	-
	TL		363	837	1749	1803	2214	2367	2922	3492	4116	4803	5562	6351
	BRG		1.5 / 3	1.5 / 3	1.8 / 4.5	1.8 / 4.6	2.3 / 5.7	2.4 / 6.1	3 / 7.5	3.6 / 8.9	4.2 / 10.5	4.9 / 12.3	5.7 / 14.2	6.5 / 16.2
9	LL		222	507	1056	1143	1899	-	-	-	-	-	-	-
	TL		225	519	1449	1518	1917	2046	2508	2979	3489	4041	4641	5253
	BRG		1.5 / 3	1.5 / 3	1.7 / 4.2	1.7 / 4.4	2.2 / 5.5	2.4 / 5.9	2.9 / 7.2	3.4 / 8.6	4 / 10	4.6 / 11.6	5.3 / 13.3	6 / 15.1
10	LL		-	-	768	834	1383	1629	-	-	-	-	-	-
	TL		144	336	1143	1227	1668	1800	2199	2598	3027	3486	3981	4479
	BRG		1.5 / 3	1.5 / 3	1.5 / 3.7	1.6 / 3.9	2.1 / 5.3	2.3 / 5.8	2.8 / 7	3.3 / 8.3	3.9 / 9.7	4.5 / 11.2	5.1 / 12.7	5.7 / 14.3
11	LL		-	-	579	627	1041	1224	-	-	-	-	-	-
	TL		96	228	855	927	1374	1518	1956	2301	2670	3063	3483	3900
	BRG		1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.3	1.9 / 4.9	2.1 / 5.4	2.8 / 6.9	3.2 / 8.1	3.8 / 9.4	4.3 / 10.8	4.9 / 12.3	5.5 / 13.7
12	LL			-	444	483	801	942	1545	-	-	-	-	-
	TL			159	654	711	1152	1272	1713	2067	2391	2733	3096	3456
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4	2 / 4.9	2.6 / 6.6	3.2 / 8	3.7 / 9.2	4.2 / 10.5	4.8 / 11.9	5.3 / 13.3
13	LL			-	351	378	630	741	1215	1812	-	-	-	-
	TL			111	513	555	930	1080	1458	1854	2163	2466	2784	3099
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	1.8 / 4.5	2.4 / 6.1	3.1 / 7.7	3.6 / 9	4.1 / 10.3	4.6 / 11.6	5.2 / 12.9
14	LL			-	279	303	504	594	972	1452	-	-	-	-
	TL			81	408	444	741	873	1254	1596	1974	2247	2529	2811
	BRG			1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	1.6 / 4	2.3 / 5.7	2.9 / 7.2	3.6 / 8.9	4 / 10.1	4.5 / 11.4	5.1 / 12.6
15	LL				228	246	411	483	789	1179	1680	-	-	-
	TL				330	357	600	708	1089	1389	1719	2061	2319	2571
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.4	2.1 / 5.3	2.7 / 6.7	3.3 / 8.3	4 / 9.9	4.5 / 11.2	5 / 12.4
16	LL				189	204	339	396	651	972	1383	-	-	-
	TL				270	291	492	579	954	1218	1506	1824	2139	2367
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	2 / 4.9	2.5 / 6.3	3.1 / 7.8	3.8 / 9.4	4.4 / 11	4.9 / 12.2
17	LL				156	171	282	330	543	810	1155	1584	-	-
	TL				222	243	408	480	795	1077	1332	1614	1917	2193
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.8 / 4.4	2.4 / 5.9	2.9 / 7.3	3.5 / 8.9	4.2 / 10.5	4.8 / 12
18	LL				132	144	237	279	456	684	972	1335	-	-
	TL				186	201	342	402	666	957	1185	1437	1707	1980
	BRG				1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	2.2 / 5.6	2.8 / 6.9	3.3 / 8.4	4 / 9.9	4.6 / 11.5
19	LL					123	201	237	390	582	828	1134	1509	-
	TL					168	288	339	564	849	1062	1287	1530	1773
	BRG					1.5 / 3	1.5 / 3	1.5 / 3	1.5 / 3.5	2.1 / 5.3	2.6 / 6.6	3.2 / 7.9	3.8 / 9.4	4.4 / 10.9
20	LL						174	204	333	498	708	972	1293	-
	TL						243	288	480	726	957	1158	1377	1596
	BRG						1.5 / 3	1.5 / 3	1.5 / 3.2	1.9 / 4.7	2.5 / 6.2	3 / 7.5	3.6 / 8.9	4.1 / 10.3
21	LL						150	177	288	429	612	840	1119	1428
	TL						210	249	414	624	864	1047	1245	1446
	BRG						1.5 / 3	1.5 / 3	1.5 / 3	1.7 / 4.3	2.4 / 5.9	2.9 / 7.2	3.4 / 8.5	3.9 / 9.9
22	LL						129	153	252	375	531	729	972	1242
	TL						180	213	357	540	774	951	1134	1314
	BRG						1.5 / 3	1.5 / 3	1.5 / 3	1.6 / 3.9	2.2 / 5.6	2.7 / 6.8	3.3 / 8.1	3.8 / 9.4
23	LL							135	219	327	465	639	852	1086
	TL							186	309	468	675	870	1035	1200
	BRG							1.5 / 3	1.5 / 3	1.5 / 3.6	2 / 5.1	2.6 / 6.6	3.1 / 7.8	3.6 / 9
24	LL								192	288	411	564	750	957
	TL								270	411	591	795	948	1098
	BRG								1.5 / 3	1.5 / 3.3	1.9 / 4.7	2.5 / 6.3	3 / 7.5	3.4 / 8.6
25	LL								171	255	363	498	663	846
	TL								237	360	519	720	870	1011
	BRG								1.5 / 3	1.5 / 3	1.7 / 4.3	2.4 / 5.9	2.9 / 7.1	3.3 / 8.3
26	LL								153	228	324	444	588	753
	TL								210	318	459	636	801	933
	BRG								1.5 / 3	1.5 / 3	1.6 / 4	2.2 / 5.5	2.7 / 6.9	3.2 / 8
27	LL								135	201	288	396	525	672
	TL								183	282	408	564	741	861
	BRG								1.5 / 3	1.5 / 3	1.5 / 3.7	2 / 5.1	2.6 / 6.6	3.1 / 7.7
28	LL								123	180	258	354	471	603
	TL								162	249	363	504	678	798
	BRG								1.5 / 3	1.5 / 3	1.5 / 3.4	1.9 / 4.7	2.5 / 6.3	3 / 7.4
29	LL									162	231	318	423	543
	TL									222	324	450	606	744
	BRG									1.5 / 3	1.5 / 3.2	1.8 / 4.4	2.3 / 5.9	2.9 / 7.1
30	LL									147	210	288	384	489
	TL									198	291	405	546	693
	BRG									1.5 / 3	1.5 / 3	1.6 / 4.1	2.2 / 5.5	2.8 / 6.9

* Can be applied to the beam in addition to its own weight.
Simple or multiple beam spans.

Key to Table:

LL = Maximum live load – limits deflection to L/360
TL = Maximum total load – limits deflections to L/240 (or a maximum of 0.3125" for beams 7¼" deep or less)
BRG = Required end / intermediate bearing length (inches), based on bearing stress of 750 psi.