

Combined K, VS, LH & DLH Series Load Table

The following table is an economy guide with the Joists listed in sequence of increasing relative cost. That is, the most economical joist for given length is listed first. The economies were based on production costs and do not include bridging requirements or erection costs.

HOW TO USE THE ECONOMICAL JOIST GUIDE: The specifying professional simply turns to the length required and proceeds down the allowable loads column until the first joist type in the list that will carry the required load is found. (However, additional bridging due to erection stability requirements should be taken into consideration.) This will then be the most economical joist type for the combination of length and required load. The approximate weight per foot of the joist is listed to the right of the live load.

EXAMPLE: Given 40'-0" length and a required load of 300 plf. On page 126 of the table under 40', it is found that a 30K7 at 40'-0" will carry 319 plf TL.

The figures shown in red are the live loads per lineal foot of joist which will produce an approximate deflection of 1/360 of the length. If a deflection limitation of 1/240 is required multiply the figures in red by 1.5. In no case shall the total load capacity of the joist be exceeded.

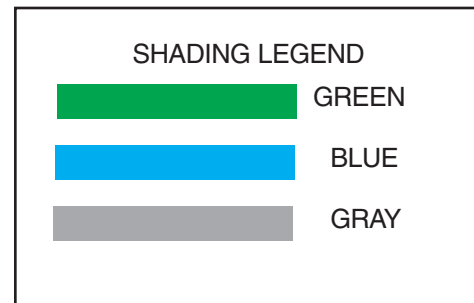
NOTE: Length as used in the economical joist guide means: **clear span + 8" for K Series and clear span + 12" for LH and DLH Series joists.**

You will note that the tables have been shaded to match the load tables. This shading indicates when bolted cross bridging needs to be installed per the Steel Joist Institute specification for a particular joist series.

Where the joist span is in the **GREEN SHADED** area of the table, the row of bridging nearest the mid span shall be diagonal bridging with bolted connections at chords and intersection. Hoisting cables shall not be released until this row of bolted diagonal bridging is completely installed.

Where the joist span is in the **BLUE SHADED** area of the table, all rows of bridging shall be diagonal bridging with bolted connections at chords and intersection. Hoist cables shall not be released until the two rows of bridging nearest the third points are completely installed.

Where the joist span is in the **GRAY SHADED** area of the table hoisting cables shall not be released until all rows of bridging are completely installed.



Total loads shown in the table are allowable total loads in ASD; the loads multiplied by 1.5 are approximately factored total loads in LRFD.

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Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)	Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)	Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)				
	Total	Live			Total	Live			Total	Live					
116' LENGTH (Cont.)				119' LENGTH (Cont.)				123' LENGTH (Cont.)				127' LENGTH (Cont.)			
64DLH12	255	146	29	64DLH15	387	206	43	64DLH13	277	148	34	72DLH15	354	188	41
60DLH13	301	154	34	60DLH16	407	201	46	68DLH13	284	168	35	64DLH16	382	189	46
64DLH13	310	176	34	72DLH16	437	252	45	64DLH14	316	158	37	72DLH16	410	221	47
60DLH14	332	165	37	68DLH16	452	254	46	68DLH14	327	179	38	64DLH17	439	215	52
64DLH14	354	189	37	72DLH17	492	287	49	68DLH15	365	201	42	72DLH17	461	252	53
68DLH15	391	228	39	64DLH17	501	262	52	72DLH15	366	200	41	64DLH18	507	243	59
60DLH15	392	194	43	68DLH17	509	289	53	72DLH16	423	236	45	68DLH18	532	276	60
64DLH15	407	223	43	60DLH18	540	259	59	68DLH16	433	236	49	72DLH18	540	284	59
60DLH16	428	217	46	64DLH18	578	296	59	64DLH17	468	237	52	72DLH19	633	323	67
68DLH16	463	268	46	68DLH18	589	327	60	68DLH17	489	268	53	128' LENGTH			
60DLH17	493	247	52	72DLH19	676	368	67	64DLH18	540	267	59				
72DLH17	505	302	50	68DLH19	678	371	67	68DLH18	566	304	60				
64DLH17	527	283	52	120' LENGTH				72DLH19	654	344	67				
60DLH18	568	279	59					124' LENGTH							
64DLH18	608	320	59												
68DLH19	696	391	66												
117' LENGTH															
60DLH12	244	124	29	60DLH12	232	115	29	64DLH12	224	119	29				
64DLH12	251	142	29	64DLH12	239	132	29	64DLH13	273	144	34				
60DLH13	296	151	34	60DLH13	282	139	34	68DLH13	279	164	35				
64DLH13	305	171	34	64DLH13	291	159	34	64DLH14	311	154	37				
60DLH14	327	161	37	60DLH14	310	149	37	68DLH14	322	175	38				
64DLH14	349	184	37	64DLH14	332	171	37	68DLH15	360	196	42				
72DLH15	385	222	38	68DLH14	337	190	38	72DLH15	363	197	41				
68DLH15	387	224	41	72DLH15	375	211	38	64DLH16	401	203	46				
64DLH15	400	217	43	68DLH15	378	213	40	72DLH16	420	232	47				
60DLH16	421	211	46	64DLH15	381	201	43	68DLH16	427	230	49				
64DLH16	450	242	46	60DLH16	400	196	46	64DLH17	461	231	52				
68DLH16	459	263	46	72DLH16	434	248	45	68DLH17	481	262	53				
60DLH17	484	241	52	68DLH16	448	250	46	64DLH18	532	261	59				
72DLH17	501	297	50	72DLH17	488	282	49	68DLH18	557	297	60				
64DLH17	518	275	52	64DLH17	492	255	52	72DLH19	649	339	68				
60DLH18	559	272	59	68DLH17	505	284	53	125' LENGTH							
64DLH18	598	311	59	60DLH18	531	252	59								
68DLH18	599	388	60	64DLH18	568	288	59								
72DLH19	687	381	67	68DLH18	584	321	60								
68DLH19	690	384	67	68DLH19	673	365	67								
118' LENGTH				121' LENGTH											
60DLH12	240	121	29	64DLH12	235	129	29								
64DLH12	247	138	29	64DLH13	286	155	34								
60DLH13	291	147	34	64DLH14	326	166	37								
60DLH14	321	156	37	64DLH14	326	166	37								
64DLH14	343	179	37	68DLH14	334	187	38								
72DLH15	382	218	38	72DLH15	372	207	40								
68DLH15	384	220	41	68DLH15	375	209	40								
64DLH15	394	211	43	72DLH16	430	244	45								
60DLH16	414	206	46	68DLH16	444	246	49								
72DLH16	441	257	45	72DLH17	484	278	49								
68DLH16	456	259	46	68DLH17	501	280	53								
72DLH17	496	292	50	64DLH18	559	282	59								
64DLH17	509	268	52	68DLH18	579	316	60								
68DLH17	513	294	53	68DLH19	667	359	67								
60DLH18	549	266	59	122' LENGTH											
64DLH18	587	304	59												
68DLH18	594	333	60												
72DLH19	682	374	67												
68DLH19	684	377	67												
119' LENGTH															
60DLH12	236	118	29												
64DLH12	243	135	29												
60DLH13	286	143	34												
64DLH13	295	163	34												
60DLH14	316	152	37												
64DLH14	337	174	37												
68DLH14	340	193	38												
72DLH15	378	214	38												
68DLH15	381	217	40												
123' LENGTH															
64DLH12	228	122	29												



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Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)	Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)	Joist Type	Allowable Loads (PLF)		Joist Weight (lbs./ft.)
	Total	Live			Total	Live			Total	Live	
132' LENGTH				136' LENGTH (Cont.)				144' LENGTH (Cont.)			
68DLH13	248	135	35	72DLH18	483	252	59	72DLH18	432	212	59
68DLH14	286	145	38	68DLH19	532	254	67	72DLH19	504	241	70
72DLH14	294	163	38	72DLH19	565	286	70				
68DLH15	317	162	41	137' LENGTH							
72DLH15	336	183	43	72DLH14	274	146	38				
68DLH16	376	190	49	72DLH15	312	163	41				
72DLH16	390	214	49	72DLH16	363	191	49				
68DLH17	427	217	53	72DLH17	408	218	53				
72DLH17	438	245	56	72DLH18	479	247	59				
68DLH18	493	246	59	72DLH19	557	280	70				
72DLH18	512	276	59	138' LENGTH							
68DLH19	565	278	67	72DLH14	270	143	38				
72DLH19	600	313	70	72DLH15	308	160	42				
133' LENGTH				72DLH16	358	188	49				
68DLH13	244	133	35	72DLH17	402	213	53				
68DLH14	281	141	38	72DLH18	470	242	59				
72DLH14	290	159	38	72DLH19	549	274	70				
68DLH15	312	158	41	139' LENGTH							
72DLH15	331	178	41	72DLH14	266	139	38				
68DLH16	371	186	49	72DLH15	303	156	41				
72DLH16	384	209	49	72DLH16	353	183	49				
68DLH17	420	212	53	72DLH17	397	209	53				
72DLH17	432	239	56	72DLH18	463	236	59				
68DLH18	486	240	59	72DLH19	541	541	70				
72DLH18	505	270	59	140' LENGTH							
68DLH19	557	272	67	72DLH14	262	136	38				
72DLH19	591	306	70	72DLH15	299	152	41				
134' LENGTH				72DLH16	348	179	49				
68DLH13	241	130	35	72DLH17	391	205	53				
68DLH14	277	138	38	72DLH18	457	231	59				
72DLH14	285	155	38	72DLH19	533	263	70				
68DLH15	308	155	41	141' LENGTH							
72DLH15	326	174	41	72DLH14	259	133	38				
68DLH16	365	182	49	72DLH15	295	150	42				
72DLH16	378	205	49	72DLH16	343	175	49				
72DLH17	426	233	53	72DLH17	386	200	53				
68DLH18	479	234	60	72DLH18	450	227	59				
72DLH18	497	265	59	72DLH19	526	257	70				
68DLH19	548	266	67	142' LENGTH							
72DLH19	582	300	70	72DLH14	255	131	38				
135' LENGTH				72DLH15	291	147	42				
68DLH13	237	127	35	72DLH16	338	171	49				
68DLH14	273	135	38	72DLH17	381	196	53				
72DLH14	281	152	38	72DLH18	444	222	59				
68DLH15	303	152	42	72DLH19	518	251	70				
72DLH15	322	171	42	143' LENGTH							
68DLH16	360	178	49	72DLH14	252	128	38				
72DLH16	373	200	49	72DLH15	286	143	41				
68DLH17	408	203	53	72DLH16	334	169	49				
72DLH17	420	228	53	72DLH17	376	191	53				
68DLH18	472	230	60	72DLH18	438	217	59				
72DLH18	490	258	59	72DLH19	511	247	70				
68DLH19	540	260	67	144' LENGTH							
72DLH19	573	293	70	72DLH14	248	125	38				
136' LENGTH				72DLH15	282	140	41				
68DLH13	234	124	35	72DLH16	329	165	49				
68DLH14	269	133	38	72DLH17	371	188	53				
72DLH14	277	149	38								
68DLH15	299	148	41								
72DLH15	317	167	42								
68DLH16	354	174	49								
72DLH16	368	196	49								
68DLH17	403	198	53								
72DLH17	414	224	56								
68DLH18	465	225	60								

