

LRFD

STANDARD LOAD TABLE FOR LONGSPAN STEEL JOISTS, LH-SERIES
Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft. (Joists only)	Depth in inches	SAFELOAD* in Lbs. Between	CLEAR SPAN IN FEET																	
				28-32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
				24LH03	11	24	17250	513	508	504	484	460	439	418	400	382	366	351	336	322	310
24LH04	12	24	21150	628	597	568	540	514	490	468	447	427	409	393	376	361	346	333	321		
24LH05	13	24	22650	673	669	660	628	598	570	544	520	496	475	456	436	420	403	387	372		
24LH06	16	24	30450	906	868	832	795	756	726	685	655	625	598	571	546	522	501	480	460		
24LH07	17	24	33450	997	957	919	882	847	811	774	736	702	669	639	610	583	559	535	514		
24LH08	18	24	35700	1060	1015	973	933	895	858	817	780	745	712	682	652	625	600	576	553		
24LH09	21	24	42000	1248	1212	1177	1146	1096	1044	994	948	903	861	822	786	751	720	690	661		
24LH10	23	24	44400	1323	1284	1248	1213	1182	1152	1105	1053	1002	955	911	873	834	799	766	735		
24LH11	25	24	46800	1390	1350	1312	1276	1243	1210	1180	1152	1101	1051	1006	963	924	885	850	816		
				33-40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55		
28LH05	13	28	21000	505	484	465	445	429	412	397	382	367	355	342	330	319	309	298	289		
28LH06	16	28	27900	672	643	618	592	568	546	525	505	486	469	451	436	421	406	393	379		
28LH07	17	28	31500	757	726	696	667	640	615	591	568	547	528	508	490	474	457	442	427		
28LH08	18	28	33750	810	775	744	712	684	657	630	604	580	556	535	516	496	478	462	445		
28LH09	21	28	41550	1000	958	918	879	844	810	778	748	721	694	669	645	622	601	580	561		
28LH10	23	28	45450	1093	1056	1018	976	937	900	864	831	799	769	742	715	690	666	643	622		
28LH11	25	28	48750	1170	1143	1104	1066	1023	982	943	907	873	841	810	781	753	727	702	679		
28LH12	27	28	53550	1285	1255	1227	1200	1173	1149	1105	1063	1023	984	948	913	880	849	819	790		
28LH13	30	28	55800	1342	1311	1281	1252	1224	1198	1173	1149	1126	1083	1041	1002	964	930	897	865		
				38-46	47-48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
32LH06	14	32	25050	507	489	472	456	441	426	412	399	385	373	363	351	340	330	321	312		
32LH07	16	32	28200	568	549	529	511	493	477	462	447	432	418	406	393	381	370	360	349		
32LH08	17	32	30600	616	595	574	553	535	517	499	483	468	453	439	426	412	400	388	378		
32LH09	21	32	38400	774	747	720	694	670	648	627	606	586	568	550	534	517	502	487	472		
32LH10	21	32	42450	856	825	796	768	742	717	693	667	645	624	603	583	564	546	529	513		
32LH11	24	32	46500	937	903	870	840	811	783	757	732	709	687	664	643	624	604	585	567		
32LH12	27	32	54600	1101	1068	1032	996	961	928	897	867	838	811	786	762	738	715	694	673		
32LH13	30	32	60900	1225	1201	1177	1156	1113	1072	1035	999	964	931	900	871	843	816	790	766		
32LH14	33	32	62700	1264	1239	1215	1192	1170	1149	1107	1069	1032	997	964	933	903	874	846	820		
32LH15	35	32	64800	1305	1279	1255	1231	1207	1186	1164	1144	1125	1087	1051	1017	984	952	924	895		
				42-46	47-56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
36LH07	16	36	25200	438	424	411	399	387	376	366	355	345	336	327	318	310	301	294	286		
36LH08	18	36	27750	481	466	453	439	426	414	402	390	379	369	358	349	340	331	322	313		
36LH09	21	36	35550	616	597	579	561	544	528	513	499	484	471	459	445	433	423	412	400		
36LH10	21	36	39150	681	660	639	619	601	583	567	550	535	520	507	492	480	466	454	442		
36LH11	23	36	42750	742	720	697	676	657	637	618	601	583	567	552	537	522	508	495	483		
36LH12	25	36	51150	889	862	835	810	784	762	739	717	696	675	655	636	617	600	583	567		
36LH13	30	36	60150	1045	1012	981	951	922	894	868	843	819	796	774	753	732	712	694	676		
36LH14	36	36	66300	1152	1132	1093	1059	1024	991	961	931	903	876	850	826	802	780	757	738		
36LH15	36	36	69900	1213	1192	1171	1153	1116	1081	1047	1015	984	955	927	900	874	850	826	804		



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Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft. (Joists Only)	Depth in inches	SAFELOAD* in Lbs. Between		CLEAR SPAN IN FEET																	
			47-59	60-64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80		
			40LH08	16	40	24900	24900	381	370	361	351	342	333	325	316	309	301	294	288	280	274	267
40LH09	21	40	32700	32700	498	484	472	459	447	436	424	414	403	394	384	375	366	358	349	342		
40LH10	21	40	36000	36000	550	535	520	507	493	481	469	457	445	435	424	414	403	393	382	373		
40LH11	22	40	39300	39300	598	582	567	552	537	523	510	498	484	472	462	450	439	429	418	409		
40LH12	25	40	47850	47850	729	708	688	670	652	636	619	603	588	573	559	546	532	519	507	495		
40LH13	30	40	56400	56400	859	835	813	792	771	750	730	712	694	676	660	643	628	613	598	585		
40LH14	35	40	64500	64500	984	957	930	904	880	856	834	813	792	772	753	735	717	699	682	666		
40LH15	36	40	72150	72150	1101	1068	1036	1006	978	949	924	898	874	850	828	807	786	766	747	729		
40LH16	42	40	79500	79500	1212	1194	1176	1158	1141	1126	1095	1065	1036	1009	982	957	933	909	886	864		
					52-59	60-72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
44LH09	19	44	30000	30000	408	397	388	379	370	363	354	346	339	331	324	316	310	303	297	291		
44LH10	21	44	33150	33150	450	439	429	418	408	399	390	381	373	364	357	349	342	334	327	321		
44LH11	22	44	35850	35850	487	475	465	453	442	433	423	414	403	396	387	378	370	363	354	348		
44LH12	25	44	44400	44400	603	589	574	561	547	534	520	508	496	484	472	462	450	439	430	420		
44LH13	30	44	52650	52650	715	699	681	666	649	634	619	606	592	579	565	553	541	529	519	507		
44LH14	31	44	60600	60600	823	801	780	759	739	721	703	685	669	654	637	622	609	594	580	568		
44LH15	36	44	70500	70500	958	934	912	889	868	847	826	805	786	768	750	732	714	699	682	667		
44LH16	42	44	81300	81300	1105	1078	1051	1026	1002	978	955	933	912	891	870	852	832	814	796	780		
44LH17	47	44	87300	87300	1185	1170	1153	1138	1125	1098	1072	1048	1024	1000	978	957	936	915	895	876		
					56-59	60-80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
48LH10	21	48	30000	30000	369	361	354	346	339	331	325	318	312	306	300	294	288	282	277	271		
48LH11	22	48	32550	32550	399	390	382	373	366	358	351	343	337	330	324	318	312	306	300	294		
48LH12	25	48	41100	41100	504	493	483	472	462	451	442	433	424	415	408	399	391	384	376	369		
48LH13	29	48	49200	49200	603	589	576	564	552	540	529	517	507	498	487	477	468	459	450	441		
48LH14	32	48	58050	58050	712	696	681	666	651	637	624	610	598	585	574	562	550	540	529	519		
48LH15	36	48	66750	66750	817	799	781	765	748	732	717	702	687	672	658	645	633	619	607	595		
48LH16	42	48	76950	76950	943	922	901	882	864	844	826	810	792	777	760	745	730	715	702	688		
48LH17	47	48	86400	86400	1059	1035	1012	990	969	948	928	909	889	871	853	837	820	804	787	772		

* The safe factored uniform load for the clear spans shown in the Safe Load Column is equal to (Safe Load) / (Clear span + 0.67). (The added 0.67 feet (8 inches) is required to obtain the proper length on which the Load Tables were developed).

In no case shall the safe factored uniform load, for clear spans less than the minimum clear span shown in the Safe Load Column, exceed the uniform load calculated for the minimum clear span listed in the Safe Load Column.

To solve for *live* loads for clear spans shown in the Safe Load Column (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load Table by the (the shortest clear span shown in the Load Table + 0.67 feet)² and divide by (the actual clear span + 0.67 feet)². The live load shall not exceed the safe uniform load.



STANDARD ASD LOAD TABLE

LONGSPAN STEEL JOISTS, LH-SERIES

Based on a 50 ksi Maximum Yield Strength
 Adopted by the Steel Joist Institute May 25, 1983
 Revised to November 10, 2003 - Effective March 01, 2005

The black figures in the following table give the TOTAL safe uniformly distributed load-carrying capacities, in pounds per linear foot, of **ASD LH-Series** Steel Joists. The weight of DEAD loads, including the joists, must in all cases be deducted to determine the LIVE load-carrying capacities of the joists. The approximate DEAD load of the joists may be determined from the weights per linear foot shown in the tables.

The **RED** figures in this load table are the nominal LIVE loads per linear foot of joist which will produce an approximate deflection of 1/360 of the span. LIVE loads which will produce a deflection of 1/240 of the span may be obtained by multiplying the **RED** figures by 1.5. In no case shall the TOTAL load capacity of the joists be exceeded.

This load table applies to joists with either parallel chords or standard pitched top chords. When top chords are pitched, the carrying capacities are determined by the nominal depth of the joists at the center of the span. Standard top chord pitch is 1/8 inch per foot. If pitch exceeds this standard, the load table does not apply. Sloped parallel-chord joists shall use span as defined by the length along the slope.

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

The approximate moment of inertia of the joist, in inches⁴ is; $I_j = 26.767(W_{LL})(L^3)(10^{-6})$, where W_{LL} = **RED** figure in the Load Table, and L = (clear span + 0.67) in feet.

When holes are required in top or bottom chords, the carrying capacities must be reduced in proportion to the reduction of chord areas.

The top chords are considered as being stayed laterally by floor slab or roof deck.

The approximate joist weights per linear foot shown in these tables do not include accessories.



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 Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft (Joists only)	Depth in inches	SAFE LOAD* in Lbs. Between	CLEAR SPAN IN FEET																
				21-24	25	26	27	28	29	30	31	32	33	34	35	36				
18LH02	10	18	12000	468	442	418	391	367	345	324	306	289	273	259	245					
18LH03	11	18	13300	521	493	467	438	409	382	359	337	317	299	283	267					
18LH04	12	18	15500	604	571	535	500	469	440	413	388	365	344	325	308					
18LH05	15	18	17500	684	648	614	581	543	508	476	448	421	397	375	355					
18LH06	15	18	20700	809	749	696	648	605	566	531	499	470	443	418	396					
18LH07	17	18	21500	840	809	780	726	678	635	595	559	526	496	469	444					
18LH08	19	18	22400	876	843	812	784	758	717	680	641	604	571	540	512					
18LH09	21	18	24000	936	901	868	838	810	783	759	713	671	633	598	566					
			22-24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	
20LH02	10	20	11300	442	437	431	410	388	365	344	325	307	291	275	262	249	237	225	215	
20LH03	11	20	12000	469	463	458	452	434	414	395	372	352	333	316	299	283	269	255	243	
20LH04	12	20	14700	574	566	558	528	496	467	440	416	393	372	353	335	318	303	289	275	
20LH05	14	20	15800	616	609	602	595	571	544	513	484	458	434	411	390	371	353	336	321	
20LH06	15	20	21100	822	791	763	723	679	635	596	560	527	497	469	444	421	399	379	361	
20LH07	17	20	22500	878	845	814	786	760	711	667	627	590	556	526	497	471	447	425	404	
20LH08	19	20	23200	908	873	842	813	785	760	722	687	654	621	588	558	530	503	479	457	
20LH09	21	20	25400	990	953	918	886	856	828	802	778	755	712	673	636	603	572	544	517	
20LH10	23	20	27400	1068	1028	991	956	924	894	875	839	814	791	748	707	670	636	604	575	





STANDARD LOAD TABLE FOR LONGSPAN STEEL JOISTS, LH-SERIES
Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft. (Joists only)	Depth in inches	SAFELOAD* in Lbs. Between	CLEAR SPAN IN FEET																
				33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	
24LH03	11	24	11500	342	339	336	323	307	293	279	267	255	244	234	224	215	207	199	191	
24LH04	12	24	14100	419	398	379	360	343	327	312	298	285	273	262	251	241	231	222	214	
24LH05	13	24	15100	449	446	440	419	399	380	363	347	331	317	304	291	280	269	258	248	
24LH06	16	24	20300	604	579	555	530	504	480	457	437	417	399	381	364	348	334	320	307	
24LH07	17	24	22300	665	638	613	588	565	541	516	491	468	446	426	407	389	373	357	343	
24LH08	18	24	23800	707	677	649	622	597	572	545	520	497	475	455	435	417	400	384	369	
24LH09	21	24	28000	832	808	785	764	731	696	663	632	602	574	548	524	501	480	460	441	
24LH10	23	24	29600	882	856	832	809	788	768	737	702	668	637	608	582	556	533	511	490	
24LH11	25	24	31200	927	900	875	851	829	807	787	768	734	701	671	642	616	590	567	544	
			33-40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	
28LH05	13	28	14000	337	323	310	297	286	275	265	255	245	237	228	220	213	206	199	193	
28LH06	16	28	18600	448	429	412	395	379	364	350	337	324	313	301	291	281	271	262	253	
28LH07	17	28	21000	505	484	464	445	427	410	394	379	365	352	339	327	316	305	295	285	
28LH08	18	28	22500	540	517	496	475	456	438	420	403	387	371	357	344	331	319	308	297	
28LH09	21	28	27700	667	639	612	586	563	540	519	499	481	463	446	430	415	401	387	374	
28LH10	23	28	30300	729	704	679	651	625	600	576	554	533	513	495	477	460	444	429	415	
28LH11	25	28	32500	780	762	736	711	682	655	629	605	582	561	540	521	502	485	468	453	
28LH12	27	28	35700	857	837	818	800	782	766	737	709	682	656	632	609	587	566	546	527	
28LH13	30	28	37200	895	874	854	835	816	799	782	766	751	722	694	668	643	620	598	577	
			38-46	47-48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
32LH06	14	32	16700	16700	338	326	315	304	294	284	275	266	257	249	242	234	227	220	214	208
32LH07	16	32	18800	18800	379	366	353	341	329	318	308	298	288	279	271	262	254	247	240	233
32LH08	17	32	20400	20400	411	397	383	369	357	345	333	322	312	302	293	284	275	267	259	252
32LH09	21	32	25600	25600	516	498	480	463	447	432	418	404	391	379	367	356	345	335	325	315
32LH10	21	32	28300	28300	571	550	530	512	495	478	462	445	430	416	402	389	376	364	353	342
32LH11	24	32	31000	31000	625	602	580	560	541	522	505	488	473	458	443	429	416	403	390	378
32LH12	27	32	36400	36400	734	712	688	664	641	619	598	578	559	541	524	508	492	477	463	449
32LH13	30	32	40600	40600	817	801	785	771	742	715	690	666	643	621	600	581	562	544	527	511
32LH14	33	32	41800	41800	843	826	810	795	780	766	738	713	688	665	643	622	602	583	564	547
32LH15	35	32	43200	43200	870	853	837	821	805	791	776	763	750	725	701	678	656	635	616	597
			42-46	47-56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
36LH07	16	36	16800	16800	292	283	274	266	258	251	244	237	230	224	218	212	207	201	196	191
36LH08	18	36	18500	18500	321	311	302	293	284	276	268	260	253	246	239	233	227	221	215	209
36LH09	21	36	23700	23700	411	398	386	374	363	352	342	333	323	314	306	297	289	282	275	267
36LH10	21	36	26100	26100	454	440	426	413	401	389	378	367	357	347	338	328	320	311	303	295
36LH11	23	36	28500	28500	495	480	465	451	438	425	412	401	389	378	368	358	348	339	330	322
36LH12	25	36	34100	34100	593	575	557	540	523	508	493	478	464	450	437	424	412	400	389	378
36LH13	30	36	40100	40100	697	675	654	634	615	596	579	562	546	531	516	502	488	475	463	451
36LH14	36	36	44200	44200	768	755	729	706	683	661	641	621	602	584	567	551	535	520	505	492
36LH15	36	36	46600	46600	809	795	781	769	744	721	698	677	656	637	618	600	583	567	551	536





STANDARD LOAD TABLE FOR LONGSPAN STEEL JOISTS, LH-SERIES
Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft. (Joists Only)	Depth in inches	SAFELOAD* in Lbs. Between		CLEAR SPAN IN FEET															
			47-59	60-64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
			52-59	60-72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
40LH08	16	40	16600	16600	254	247	241	234	228	222	217	211	206	201	196	192	187	183	178	174
40LH09	21	40	21800	21800	332	323	315	306	298	291	283	276	269	263	256	250	244	239	233	228
40LH10	21	40	24000	24000	367	357	347	338	329	321	313	305	297	290	283	276	269	262	255	249
40LH11	22	40	26200	26200	399	388	378	368	358	349	340	332	323	315	308	300	293	286	279	273
40LH12	25	40	31900	31900	486	472	459	447	435	424	413	402	392	382	373	364	355	346	338	330
40LH13	30	40	37600	37600	573	557	542	528	514	500	487	475	463	451	440	429	419	409	399	390
40LH14	35	40	43000	43000	656	638	620	603	587	571	556	542	528	515	502	490	478	466	455	444
40LH15	36	40	48100	48100	734	712	691	671	652	633	616	599	583	567	552	538	524	511	498	486
40LH16	42	40	53000	53000	808	796	784	772	761	751	730	710	691	673	655	638	622	606	591	576
					469	455	441	428	416	404	387	371	356	342	329	316	304	292	282	271
					73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88
44LH09	19	44	20000	20000	272	265	259	253	247	242	236	231	226	221	216	211	207	202	198	194
44LH10	21	44	22100	22100	300	293	286	279	272	266	260	254	249	243	238	233	228	223	218	214
44LH11	22	44	23900	23900	325	317	310	302	295	289	282	276	269	264	258	252	247	242	236	232
44LH12	25	44	29600	29600	402	393	383	374	365	356	347	339	331	323	315	308	300	293	287	280
44LH13	30	44	35100	35100	477	466	454	444	433	423	413	404	395	386	377	369	361	353	346	338
44LH14	31	44	40400	40400	549	534	520	506	493	481	469	457	446	436	425	415	406	396	387	379
44LH15	36	44	47000	47000	639	623	608	593	579	565	551	537	524	512	500	488	476	466	455	445
44LH16	42	44	54200	54200	737	719	701	684	668	652	637	622	608	594	580	568	555	543	531	520
44LH17	47	44	58200	58200	821	803	785	767	750	732	715	699	683	667	652	638	624	610	597	584
					450	438	426	415	405	390	376	363	351	338	327	316	305	295	285	276
					81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
48LH10	21	48	20000	20000	246	241	236	231	226	221	217	212	208	204	200	196	192	188	185	181
48LH11	22	48	21700	21700	266	260	255	249	244	239	234	229	225	220	216	212	208	204	200	196
48LH12	25	48	27400	27400	336	329	322	315	308	301	295	289	283	277	272	266	261	256	251	246
48LH13	29	48	32800	32800	402	393	384	376	368	360	353	345	338	332	325	318	312	306	300	294
48LH14	32	48	38700	38700	475	464	454	444	434	425	416	407	399	390	383	375	367	360	353	346
48LH15	36	48	44500	44500	545	533	521	510	499	488	478	468	458	448	439	430	422	413	405	397
48LH16	42	48	51300	51300	629	615	601	588	576	563	551	540	528	518	507	497	487	477	468	459
48LH17	47	48	57600	57600	706	690	675	660	646	632	619	606	593	581	569	558	547	536	525	515
					397	383	371	358	346	335	324	314	304	294	285	276	268	260	252	245

* The safe uniform load for the clear spans shown in the Safe Load Column is equal to (Safe Load) / (Clear span + 0.67). (The added 0.67 feet (8 inches) is required to obtain the proper length on which the Load Tables were developed).

In no case shall the safe uniform load, for clear spans less than the minimum clear span shown in the Safe Load Column, exceed the uniform load calculated for the minimum clear span listed in the Safe Load Column.

To solve for *live* loads for clear spans shown in the Safe Load Column (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load Table by the (the shortest clear span shown in the Load Table + 0.67 feet)² and divide by (the actual clear span + 0.67 feet)². The live load shall *not* exceed the safe uniform load.



STANDARD LRFD LOAD TABLE

DEEP LONGSPAN STEEL JOISTS, DLH-SERIES

Based on a 50 ksi Maximum Yield Strength
 Adopted by the Steel Joist Institute May 1, 2000
 Revised to November 10, 2003 - Effective March 01, 2005

The black figures in the following table give the TOTAL safe factored uniformly distributed load-carrying capacities, in pounds per linear foot, of an **LRFD DLH-Series** Steel Joists. The weight of factored DEAD loads, including the joists, must in all cases be deducted to determine the factored LIVE load-carrying capacities of the joists. The approximate DEAD load of the joists may be determined from the weights per linear foot shown in the tables. All loads shown are for roof construction only.

The **RED** figures in this load table are the unfactored, nominal LIVE loads per linear foot of joist which will produce an approximate deflection of 1/360 of the span. LIVE loads which will produce a deflection of 1/240 of the span may be obtained by multiplying the **RED** figures by 1.5. In no case shall the TOTAL load capacity of the joists be exceeded.

This load table applies to joists with either parallel chords or standard pitched top chords. When top chords are pitched, the carrying capacities are determined by the nominal depth of the joists at the center of the span. Standard top chord pitch is 1/8 inch per foot. If pitch exceeds this standard, the load table does not apply. Sloped parallel-chord joists shall use span as defined by the length along the slope.

All rows of bridging shall be diagonal bridging with bolted connections at the chords and intersections.

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

The approximate moment of inertia of the joist, in inches⁴ is; $I_j = 26.767(W_{LL})(L^3)(10^{-6})$, where W_{LL} = **RED** figure in the Load Table, and L = (clear span + 0.67) in feet.

When holes are required in top or bottom chords, the carrying capacities must be reduced in proportion to the reduction of chord areas.

The top chords are considered as being stayed laterally by floor slab or roof deck.

The approximate joist weights per linear foot shown in these tables do not include accessories.

LRFD

STANDARD LOAD TABLE FOR DEEP LONGSPAN STEEL JOISTS, DLH-SERIES
 Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft (Joists only)	Depth in inches	SAFELOAD* in Lbs. Between	CLEAR SPAN IN LINEAR FEET																
				61-88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
				66-96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112
52DLH10	25	52	40050	447	436	427	418	409	400	391	384	376	369	361	354	346	340	334	327	
52DLH11	26	52	43950	490	480	469	459	448	439	430	421	412	405	396	388	381	373	366	360	
52DLH12	29	52	49050	547	535	523	513	501	490	480	471	460	451	442	433	426	417	409	402	
52DLH13	34	52	59550	664	649	636	621	609	595	583	571	559	549	537	526	516	507	496	487	
52DLH14	39	52	68100	760	745	729	714	699	685	670	657	645	631	619	607	595	585	573	562	
52DLH15	42	52	76500	853	835	817	799	783	766	750	735	720	705	691	676	664	651	639	627	
52DLH16	45	52	82500	921	901	882	862	844	826	810	792	777	760	745	730	717	702	688	676	
52DLH17	52	52	94950	1059	1036	1014	991	970	951	930	912	892	874	858	840	823	808	792	777	
56DLH11	26	56	42150	432	424	415	408	400	393	385	379	372	366	358	352	346	340	334	328	
56DLH12	30	56	48450	496	486	477	468	459	450	442	433	426	417	409	402	394	388	381	373	
56DLH13	34	56	58650	601	591	579	568	558	547	537	526	516	507	496	487	478	471	462	454	
56DLH14	39	56	66300	679	666	652	640	628	616	604	594	582	571	562	552	541	532	523	514	
56DLH15	42	56	75750	777	762	747	732	717	703	690	676	664	651	639	628	616	604	594	583	
56DLH16	46	56	81750	838	822	805	789	774	759	744	730	717	703	690	678	666	654	642	630	
56DLH17	51	56	94200	964	945	924	907	891	873	856	840	823	808	793	780	765	751	738	724	



STANDARD LOAD TABLE LONGSPAN STEEL JOISTS, LRFD DLH-SERIES
Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft (Joists only)	Depth in inches	SAFE LOAD* in Lbs. Between		CLEAR SPAN IN LINEAR FEET															
			70-99	100-104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
			60DLH12	29	60	46650	46650	442	433	426	418	411	405	397	391	384	378	372	366	360
60DLH13	35	60	56700	56700	537	526	517	508	499	490	483	474	466	459	451	444	436	429	423	415
60DLH14	40	60	63000	63000	597	586	574	564	555	544	534	525	516	507	498	490	481	474	465	457
60DLH15	43	60	73950	73950	700	687	675	663	651	640	628	618	607	597	588	577	568	559	550	541
60DLH16	46	60	81300	81300	769	756	741	727	714	702	690	676	666	654	642	631	621	610	600	589
60DLH17	52	60	93450	93450	885	868	853	837	822	807	793	778	765	751	739	726	714	702	690	679
60DLH18	59	60	107850	107850	1021	1002	984	966	948	931	915	898	883	867	852	838	823	810	796	783
			75-99	100-112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
64DLH12	31	64	45000	45000	396	388	382	376	370	364	358	352	346	342	336	331	327	321	316	312
64DLH13	34	64	54600	54600	481	472	465	457	450	442	436	429	421	415	409	403	396	390	385	379
64DLH14	40	64	62550	62550	550	540	531	523	514	505	498	489	481	474	466	459	451	444	438	430
64DLH15	43	64	71700	71700	631	621	610	600	591	580	571	562	553	544	537	528	520	511	504	496
64DLH16	46	64	80700	80700	711	699	687	675	664	652	642	631	621	610	601	591	582	573	564	555
64DLH17	52	64	93000	93000	819	804	790	777	763	751	738	726	714	702	691	681	669	658	648	639
64DLH18	59	64	107400	107400	945	928	912	897	880	867	852	838	823	810	798	784	772	760	748	736
			80-99	100-120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136
68DLH13	37	68	52500	52500	432	426	418	412	406	400	394	388	382	378	372	366	361	355	351	346
68DLH14	40	68	60450	60450	498	490	483	475	468	462	454	448	441	435	429	421	415	409	403	399
68DLH15	44	68	67800	67800	558	547	540	531	522	514	505	498	490	483	475	468	462	454	448	441
68DLH16	49	68	80400	80400	661	649	640	630	619	610	600	591	582	573	564	556	547	540	531	523
68DLH17	55	68	90600	90600	745	733	721	711	700	690	679	669	658	649	640	630	621	612	604	595
68DLH18	61	68	104850	104850	862	849	835	823	810	798	786	774	762	751	739	729	718	708	697	688
68DLH19	67	68	120750	120750	993	976	961	946	931	916	901	888	874	861	847	835	822	810	798	787
			84-99	100-128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
72DLH14	41	72	58800	58800	454	447	441	435	427	421	415	411	405	399	393	388	382	378	372	367
72DLH15	44	72	67350	67350	520	513	504	496	489	483	475	468	462	454	448	442	436	429	423	418
72DLH16	50	72	77850	77850	601	592	585	576	567	559	552	544	537	529	522	514	507	501	493	487
72DLH17	56	72	87600	87600	676	667	657	648	639	630	621	612	603	595	586	579	571	564	556	549
72DLH18	59	72	102600	102600	792	780	768	757	745	735	724	718	705	694	685	675	666	657	648	639
72DLH19	70	72	120300	120300	928	913	900	886	873	859	847	835	823	811	799	789	777	766	756	745

* The safe factored uniform load for the clear spans shown in the Safe Load Column is equal to (Safe Load) / (Clear span + 0.67). (The added 0.67 feet (8 inches) is required to obtain the proper length on which the Load Tables were developed).

In no case shall the safe uniform load, for clear spans less than the minimum clear span shown in the Safe Load Column, exceed the uniform load calculated for the minimum clear span listed in the Safe Load Column.

To solve for *live* loads for clear spans shown in the Safe Load Column (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load Table by (the shortest clear span shown in the Load Table + 0.67 feet)² and divide by (the actual clear span + 0.67 feet)². The live load shall not exceed the safe uniform load.



STANDARD ASD LOAD TABLE

DEEP LONGSPAN STEEL JOISTS, DLH-SERIES

Based on a 50 ksi Maximum Yield Strength
 Adopted by the Steel Joist Institute May 25, 1983
 Revised to November 10, 2003 - Effective March 01, 2005

The black figures in the following table give the TOTAL safe uniformly distributed load-carrying capacities, in pounds per linear foot, of an **ASD DLH-Series** Steel Joists. The weight of DEAD loads, including the joists, must in all cases be deducted to determine the LIVE load-carrying capacities of the joists. The approximate DEAD load of the joists may be determined from the weights per linear foot shown in the tables. All loads shown are for roof construction only.

The **RED** figures in this load table are the nominal LIVE loads per linear foot of joist which will produce an approximate deflection of 1/360 of the span. LIVE loads which will produce a deflection of 1/240 of the span may be obtained by multiplying the **RED** figures by 1.5. In no case shall the TOTAL load capacity of the joists be exceeded.

This load table applies to joists with either parallel chords or standard pitched top chords. When top chords are pitched, the carrying capacities are determined by the nominal depth of the joists at the center of the span. Standard top chord pitch is 1/8 inch per foot. If pitch exceeds this standard, the load table does not apply. Sloped parallel-chord joists shall use span as defined by the length along the slope.

All rows of bridging shall be diagonal bridging with bolted connections at the chords and intersections.

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

The approximate moment of inertia of the joist, in inches⁴ is; $I_j = 26.767(W_{LL})(L^3)(10^{-6})$, where W_{LL} = **RED** figure in the Load Table, and L = (clear span + 0.67) in feet.

When holes are required in top or bottom chords, the carrying capacities must be reduced in proportion to the reduction of chord areas.

The top chords are considered as being stayed laterally by floor slab or roof deck.

The approximate joist weights per linear foot shown in these tables do not include accessories.



STANDARD LOAD TABLE LONGSPAN STEEL JOISTS, DLH-SERIES
 Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft (Joists only)	Depth in inches	SAFELOAD* in Lbs. Between	CLEAR SPAN IN FEET																
				61-88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104
52DLH10	25	52	26700	298	291	285	279	273	267	261	256	251	246	241	236	231	227	223	218	
52DLH11	26	52	29300	327	320	313	306	299	293	287	281	275	270	264	259	254	249	244	240	
52DLH12	29	52	32700	365	357	349	342	334	327	320	314	307	301	295	289	284	278	273	268	
52DLH13	34	52	39700	443	433	424	414	406	397	389	381	373	366	358	351	344	338	331	325	
52DLH14	39	52	45400	507	497	486	476	466	457	447	438	430	421	413	405	397	390	382	375	
52DLH15	42	52	51000	569	557	545	533	522	511	500	490	480	470	461	451	443	434	426	418	
52DLH16	45	52	55000	614	601	588	575	563	551	540	528	518	507	497	487	478	468	459	451	
52DLH17	52	52	63300	706	691	676	661	647	634	620	608	595	583	572	560	549	539	528	518	
			66-96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	
56DLH11	26	56	28100	288	283	277	272	267	262	257	253	248	244	239	235	231	227	223	219	
56DLH12	30	56	32300	331	324	318	312	306	300	295	289	284	278	273	268	263	259	254	249	
56DLH13	34	56	39100	401	394	386	379	372	365	358	351	344	338	331	325	319	314	308	303	
56DLH14	39	56	44200	453	444	435	427	419	411	403	396	388	381	375	368	361	355	349	343	
56DLH15	42	56	50500	518	508	498	488	478	469	460	451	443	434	426	419	411	403	396	389	
56DLH16	46	56	54500	559	548	537	526	516	506	496	487	478	469	460	452	444	436	428	420	
56DLH17	51	56	62800	643	630	618	605	594	582	571	560	549	539	529	520	510	501	492	483	



STANDARD LOAD TABLE LONGSPAN STEEL JOISTS, DLH-SERIES
Based on a 50 ksi Maximum Yield Strength - Loads Shown in Pounds per Linear Foot (plf)

Joist Designation	Approx. Wt in Lbs. Per Linear Ft (Joists only)	Depth in inches	SAFE LOAD* in Lbs. Between		CLEAR SPAN IN FEET															
			70-99	100-104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120
			60DLH12	29	60	31100	31100	295 168	289 163	284 158	279 154	274 150	270 146	265 142	261 138	256 134	252 131	248 128	244 124	240 121
60DLH13	35	60	37800	37800	358 203	351 197	345 191	339 187	333 181	327 176	322 171	316 167	311 163	306 158	301 154	296 151	291 147	286 143	282 139	277 135
60DLH14	40	60	42000	42000	398 216	391 210	383 205	376 199	370 193	363 189	356 183	350 178	344 173	338 170	332 165	327 161	321 156	316 152	310 149	305 145
60DLH15	43	60	49300	49300	467 255	458 248	450 242	442 235	434 228	427 223	419 216	412 210	405 205	398 200	392 194	385 190	379 185	373 180	367 175	361 171
60DLH16	46	60	54200	54200	513 285	504 277	494 269	485 262	476 255	468 247	460 241	451 235	444 228	436 223	428 217	421 211	414 206	407 201	399 196	393 190
60DLH17	52	60	62300	62300	590 324	579 315	569 306	558 298	548 290	538 283	529 275	519 267	510 261	501 254	493 247	484 241	476 235	468 228	460 223	453 217
60DLH18	59	60	71900	71900	681 366	668 357	656 346	644 337	632 327	621 319	610 310	599 303	589 294	578 286	568 279	559 272	549 266	540 259	531 252	522 246
			75-99	100-112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128
64DLH12	31	64	30000	30000	264 153	259 150	255 146	251 142	247 138	243 135	239 132	235 129	231 125	228 122	224 119	221 116	218 114	214 111	211 109	208 106
64DLH13	34	64	36400	36400	321 186	315 181	310 176	305 171	300 168	295 163	291 159	286 155	281 152	277 148	273 144	269 141	264 137	260 134	257 131	253 128
64DLH14	40	64	41700	41700	367 199	360 193	354 189	349 184	343 179	337 174	332 171	326 166	321 162	316 158	311 154	306 151	301 147	296 143	292 140	287 136
64DLH15	43	64	47800	47800	421 234	414 228	407 223	400 217	394 211	387 206	381 201	375 196	369 191	363 187	358 182	352 177	347 173	341 170	336 165	331 161
64DLH16	46	64	53800	53800	474 262	466 254	458 248	450 242	443 235	435 229	428 224	421 218	414 213	407 208	401 203	394 198	388 193	382 189	376 184	370 180
64DLH17	52	64	62000	62000	546 298	536 290	527 283	518 275	509 268	501 262	492 255	484 248	476 243	468 237	461 231	454 226	446 220	439 215	432 210	426 205
64DLH18	59	64	71600	71600	630 337	619 328	608 320	598 311	587 304	578 296	568 288	559 282	549 274	540 267	532 261	523 255	515 249	507 243	499 237	491 232
			80-99	100-120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136
68DLH13	37	68	35000	35000	288 171	284 168	279 164	275 159	271 155	267 152	263 149	259 145	255 142	252 138	248 135	244 133	241 130	237 127	234 124	231 121
68DLH14	40	68	40300	40300	332 184	327 179	322 175	317 171	312 167	308 163	303 159	299 155	294 152	290 148	286 145	281 141	277 138	273 135	269 133	266 130
68DLH15	44	68	45200	45200	372 206	365 201	360 196	354 191	348 187	343 182	337 178	332 174	327 170	322 166	317 162	312 158	308 155	303 152	299 148	294 145
68DLH16	49	68	53600	53600	441 242	433 236	427 230	420 225	413 219	407 214	400 209	394 204	388 199	382 195	376 190	371 186	365 182	360 178	354 174	349 171
68DLH17	55	68	60400	60400	497 275	489 268	481 262	474 256	467 249	460 244	453 238	446 232	439 228	433 222	427 217	420 212	414 208	408 203	403 198	397 194
68DLH18	61	68	69900	69900	575 311	566 304	557 297	549 289	540 283	532 276	524 269	516 263	508 257	501 251	493 246	486 240	479 234	472 230	465 225	459 219
68DLH19	67	68	80500	80500	662 353	651 344	641 336	631 328	621 320	611 313	601 305	592 298	583 291	574 285	565 278	557 272	548 266	540 260	532 254	525 248
			84-99	100-128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144
72DLH14	41	72	39200	39200	303 171	298 167	294 163	290 159	285 155	281 152	277 149	274 146	270 143	266 139	262 136	259 133	255 131	252 128	248 125	245 123
72DLH15	44	72	44900	44900	347 191	342 187	336 183	331 178	326 174	322 171	317 167	312 163	308 160	303 156	299 152	295 150	291 147	286 143	282 140	279 137
72DLH16	50	72	51900	51900	401 225	395 219	390 214	384 209	378 205	373 200	368 196	363 191	358 188	353 183	348 179	343 175	338 171	334 169	329 165	325 161
72DLH17	56	72	58400	58400	451 256	445 250	438 245	432 239	426 233	420 228	414 224	408 218	402 213	397 209	391 205	386 200	381 196	376 191	371 188	366 184
72DLH18	59	72	68400	68400	528 289	520 283	512 276	505 270	497 265	490 258	483 252	479 247	470 242	463 236	457 231	450 227	444 222	438 217	432 212	426 209
72DLH19	70	72	80200	80200	619 328	609 321	600 313	591 306	582 300	573 293	565 286	557 280	549 274	541 268	533 263	526 257	518 251	511 247	504 241	497 236

* The safe uniform load for the clear spans shown in the Safe Load Column is equal to (Safe Load) / (Clear Span + 0.67). (The added 0.67 feet (8 inches) is required to obtain the proper length on which the Load Tables were developed).

In no case shall the safe uniform load, for clear spans less than the minimum clear span shown in the Safe Load Column, exceed the uniform load calculated for the minimum clear span listed in the Safe Load Column.

To solve for *live* loads for clear spans shown in the Safe Load Column (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load Table by (the shortest clear span shown in the Load Table + 0.67 feet)² and divide by (the actual clear span + 0.67 feet)². The live load shall *not* exceed the safe uniform load.

