STANDARD LOAD TABLE

Based on a Maximum Allowable Tensile Stress of 30,000 psi

FOR DEEP LONGSPAN STEEL JOISTS, DLH- SERIES

Adopted by Steel Joist Institute and American Institute of Steel Construction, Inc., February 1, 1970

This table was developed using 30,000 psi allowable tensile stress. Steels with allowable tensile stresses from 22,000 psi to 30,000 psi may be used to meet this load table. The following table gives the TOTAL safe uniformly distributed load-carrying capacities in pounds per linear foot of span.

All loads shown are for roof construction only. The weight of DEAD loads, including weight of joists, must in all cases be deducted to determine the LIVE load-carrying capacity of the joists. Approximate weights per linear foot of joist include accessories.

The figures shown in blue are the LIVE loads per linear foot of joist which will produce an approximate deflection of 1/360 of the span. Loads which will produce an approximate deflection of 1/240 of the span may be obtained by multiplying the red figures by 1.5. (NOTE: The tabulated loads corresponding to these deflection limitations have been computed on the basis of 30,000 psi allowable stress provisions. For joists designed to a lower working stress, these loads may be increased in the ratio of 30,000 psi to the design stress used, in order to meet the same deflection limitations.) For roofs, LIVE load deflection is limited to 1/360 of the span where a plaster ceiling is attached or suspended; 1/240 of the span for all other cases. In no case shall the TOTAL capacity of the joists be exceeded.*

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

The top chords are considered as being stayed laterally by the roof deck.

The load table applies to joists with either parallel chords or standard pitched chords. When top chords are pitched, the carrying capacities are determined by the nominal depth of the joist at the center of the span. Standard top chord pitch is ⅛" per foot. If pitch exceeds this standard, the load table **does not** apply.

The load table may be used for parallel chord joists installed to a maximum slope of ½" per foot.

Joist Designation	Approx. Wt. in Lbs. per Linear Ft.	Depth in Inches	SAFE LOAD** in Lbs. Between	CLEAR OPENING OR NET SPAN IN FEET															
			61-88	**89**	**90**	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**	**99**	**100**	**101**	**102**	**103**	**104**
52DLH10	27	52	26700	298 180	291 174	285 168	279 163	273 158	267 153	261 148	256 144	251 139	246 135	241 131	236 127	231 123	227 120	223 116	218 113
52DLH11	29	52	29300	327 197	320 191	313 184	306 178	299 173	293 167	287 162	281 157	275 152	270 148	264 143	259 139	254 135	249 131	244 127	240 124
52DLH12	31	52	32700	365 215	357 208	349 202	342 195	334 189	327 183	320 177	314 172	307 167	301 162	295 157	289 152	284 148	278 143	273 139	268 135
52DLH13	36	52	39700	443 260	433 252	424 244	414 236	406 228	397 221	389 214	381 208	372 201	366 195	358 190	351 184	344 179	338 173	331 168	325 164
52DLH14	40	52	45400	507 291	497 281	486 272	476 263	466 255	457 247	447 239	438 232	430 225	421 218	413 212	405 205	397 199	390 194	382 188	375 183
52DLH15	45	52	51000	569 328	557 317	545 307	533 297	522 287	511 278	500 270	490 261	480 253	470 246	461 238	451 231	443 225	434 218	426 212	418 206
52DLH16	50	52	55000	614 365	601 353	588 342	575 331	563 320	551 310	540 301	528 291	518 282	507 274	497 266	487 258	478 250	468 243	459 236	451 229
52DLH17	55	52	63300	706 416	691 402	676 389	661 376	647 365	634 353	620 342	608 332	595 321	583 312	572 302	560 294	549 285	539 277	528 269	518 261
			66-96	**97**	**98**	**99**	**100**	**101**	**102**	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**	**111**	**112**
56DLH11	29	56	28100	288 178	283 172	277 167	272 162	267 157	262 153	257 148	253 144	248 140	244 136	239 132	235 129	231 125	227 122	223 119	219 116
56DLH12	31	56	32300	331 194	324 188	318 183	312 177	306 172	300 167	295 162	289 158	284 153	278 149	273 145	268 141	263 137	259 133	254 130	249 126
56DLH13	36	56	39100	401 235	394 228	386 221	379 215	372 208	365 202	358 196	351 191	344 185	338 180	331 175	325 170	319 166	314 161	308 157	303 153
56DLH14	40	56	44200	453 263	444 255	435 247	427 240	419 233	411 226	403 220	396 213	388 207	381 201	375 196	368 191	361 185	355 180	349 176	343 171
56DLH15	45	56	50500	518 296	508 287	498 278	488 270	478 262	469 255	460 247	451 240	443 233	434 227	426 221	419 215	411 209	403 203	396 198	389 192
56DLH16	50	56	54500	559 330	548 320	537 310	526 301	516 292	506 284	496 276	487 268	478 260	469 253	460 246	452 239	444 233	436 226	428 220	420 215
56DLH17	55	56	62800	643 375	630 364	618 353	605 343	594 333	582 323	571 314	560 305	549 296	539 288	529 280	520 272	510 265	501 258	492 251	483 244

See page LT-31 for notes

DEEP LONGSPAN STEEL JOISTS, DLH-SERIES

Based on a Maximum Allowable Tensile Stress of 30,000 psi

Joist Designation	Approx. Wt. in Lbs. per Linear Ft.	Depth in Inches	SAFE LOAD** in Lbs. Between	CLEAR OPENING OR NET SPAN IN FEET															
			70-104	**105**	**106**	**107**	**108**	**109**	**110**	**111**	**112**	**113**	**114**	**115**	**116**	**117**	**118**	**119**	**120**
60DLH12	31	60	31100	295	289	284	279	274	270	265	261	256	252	248	244	240	236	232	228
				177	172	167	163	158	154	150	146	142	138	135	131	128	125	122	119
60DLH13	36	60	37800	358	351	345	339	333	327	322	316	311	306	301	296	291	286	282	277
				214	208	202	197	191	186	181	176	172	167	163	159	155	151	147	143
60DLH14	39	60	42000	398	391	383	376	370	363	356	350	344	338	332	327	321	316	310	305
				228	222	216	210	204	199	193	188	183	179	174	170	165	161	157	153
60DLH15	45	60	49300	467	458	450	442	434	427	419	412	405	398	392	385	379	373	367	361
				269	262	255	248	241	235	228	222	216	211	205	200	195	190	185	181
60DLH16	50	60	54200	513	504	494	485	476	468	460	451	444	436	428	421	414	407	400	393
				300	292	284	276	269	261	254	248	241	235	229	223	217	212	207	201
60DLH17	55	60	62300	590	579	569	558	548	538	529	519	510	501	493	484	476	468	460	453
				342	332	323	314	306	298	290	282	275	268	261	254	248	241	235	229
60DLH18	62	60	71900	681	668	656	644	632	621	610	599	589	578	568	559	549	540	531	522
				386	376	365	355	345	336	327	319	310	302	294	287	280	273	266	259
			75-112	**113**	**114**	**115**	**116**	**117**	**118**	**119**	**120**	**121**	**122**	**123**	**124**	**125**	**126**	**127**	**128**
64DLH12	31	64	30000	264	259	255	251	247	243	239	235	231	228	224	221	218	214	211	208
				162	158	154	150	146	143	139	136	132	129	126	123	120	117	115	112
64DLH13	36	64	36400	321	315	310	305	300	295	291	286	281	277	273	269	264	260	257	253
				196	191	186	181	177	172	168	164	160	156	152	149	145	142	138	135
64DLH14	39	64	41700	367	360	354	349	343	337	332	326	321	316	311	306	301	296	292	287
				210	204	199	194	189	184	180	175	171	167	163	159	155	151	148	144
64DLH15	45	64	47800	421	414	407	400	394	387	381	375	369	363	358	352	347	341	336	331
				247	241	235	229	223	217	212	207	202	197	192	187	183	179	174	170
64DLH16	50	64	53800	474	466	458	450	443	435	428	421	414	407	401	394	388	382	376	370
				276	268	262	255	248	242	236	230	225	219	214	209	204	199	194	190
64DLH17	55	64	62000	546	536	527	518	509	501	492	484	476	468	461	454	446	439	432	426
				314	306	298	290	283	276	269	262	256	250	244	238	232	227	222	216
64DLH18	62	64	71600	630	619	608	598	587	578	568	559	549	540	532	523	515	507	499	491
				355	346	337	328	320	312	304	297	289	282	275	269	263	256	250	245
			80-120	**121**	**122**	**123**	**124**	**125**	**126**	**127**	**128**	**129**	**130**	**131**	**132**	**133**	**134**	**135**	**136**
68DLH13	36	68	35000	288	284	279	275	271	267	263	259	255	252	248	244	241	237	234	231
				181	177	173	168	164	161	157	153	150	146	143	140	137	134	131	128
68DLH14	39	68	40300	332	327	322	317	312	308	303	299	294	290	286	281	277	273	269	266
				194	189	185	180	176	172	168	164	160	156	153	149	146	143	140	137
68DLH15	43	68	45200	372	365	360	354	348	343	337	332	327	322	317	312	308	303	299	294
				217	212	207	202	197	192	188	184	179	175	171	167	164	160	156	153
68DLH16	50	68	53600	441	433	427	420	413	407	400	394	388	382	376	371	365	360	354	349
				255	249	243	237	231	226	220	215	210	206	201	196	192	188	184	180
68DLH17	55	68	60400	497	489	481	474	467	460	453	446	439	433	427	420	414	408	403	397
				290	283	276	270	263	257	251	245	240	234	229	224	219	214	209	205
68DLH18	62	68	69900	575	566	557	549	540	532	524	516	508	501	493	486	479	472	465	459
				328	320	313	305	298	291	284	277	271	265	259	253	247	243	237	231
68DLH19	70	68	80500	662	651	641	631	621	611	601	592	583	574	565	557	548	540	532	525
				372	363	354	346	337	330	322	314	307	300	293	287	280	274	268	262
			84-128	**129**	**130**	**131**	**132**	**133**	**134**	**135**	**136**	**137**	**138**	**139**	**140**	**141**	**142**	**143**	**144**
72DLH14	39	72	39200	303	298	294	290	285	281	277	274	270	266	262	259	255	252	248	245
				180	176	172	168	164	161	157	154	151	147	144	141	138	135	132	130
72DLH15	43	72	44900	347	342	336	331	326	322	317	312	308	303	299	295	291	286	282	279
				202	197	193	188	184	180	176	172	169	165	161	158	155	151	148	145
72DLH16	50	72	51900	401	395	390	384	378	373	368	363	358	353	348	343	338	334	329	325
				237	231	226	221	216	211	207	202	198	193	189	185	181	178	174	170
72DLH17	55	72	58400	451	445	438	432	426	420	414	408	402	397	391	386	381	376	371	366
				270	264	258	252	246	241	236	230	225	221	216	211	207	202	198	194
72DLH18	62	72	68400	528	520	512	505	497	490	483	479	470	463	457	450	444	438	432	426
				305	298	291	285	279	272	266	261	255	249	244	239	234	229	224	220
72DLH19	70	72	80200	619	609	600	591	582	573	565	557	549	541	533	526	518	511	504	497
				346	338	330	323	316	309	302	295	289	283	277	271	265	260	254	249

*Section 104.10 of the "Standard Specifications for Longspan Steel Joists, **LJ**- and **LH**-Series and Deep Longspan Steel Joists, **DLJ**- and **DLH**-Series" limits the design LIVE load deflection as follows: 1/360 of span where a plaster ceiling is attached or suspended; 1/240 of span for all other cases.

**To extrapolate for safe uniform load between spans shown, divide the Safe Load in pounds by net span in feet plus .67 feet. (The added .67 feet, eight inches, is necessary to obtain the proper span for which the load tables were developed.)