STANDARD LOAD TABLE

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

FOR DEEP LONGSPAN STEEL JOISTS, DLH-SERIES

Adopted by the Steel Joist Institute May 25, 1983
Revised to November 15, 1989

The black figures in the following table give the TOTAL safe uniformly-distributed load-carrying capacities, in pounds per linear foot, of DLH-Series 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 table are the 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. This load table may be used for parallel chord joists installed to a maximum slope of 1/2 inch per foot.

When holes are required in 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 approximate joist weights per linear foot shown in these tables do *not* include accessories.

Joist Designation	Approx. Wt. in Lbs. per Linear Ft. (Joists Only)	Depth in Inches	SAFE LOAD* 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	298 171	291 165	285 159	279 154	273 150	267 145	261 140	256 136	251 132	246 128	241 124	236 120	231 116	227 114	223 110	218 107
52DLH11	26	52	29300	327 187	320 181	313 174	306 169	299 164	293 158	287 153	281 149	275 144	270 140	264 135	259 132	254 128	249 124	244 120	240 117
52DLH12	29	52	32700	365 204	357 197	349 191	342 185	334 179	327 173	320 168	314 163	307 158	301 153	295 149	289 144	284 140	278 135	273 132	268 128
52DLH13	34	52	39700	443 247	433 239	424 231	414 224	406 216	397 209	389 203	381 197	373 191	366 185	358 180	351 174	344 170	338 164	331 159	325 155
52DLH14	39	52	45400	507 276	497 266	486 258	476 249	466 242	457 234	447 227	438 220	430 213	421 207	413 201	405 194	397 189	390 184	382 178	375 173
52DLH15	42	52	51000	569 311	557 301	545 291	533 282	522 272	511 264	500 256	490 247	480 240	470 233	461 226	451 219	443 213	434 207	426 201	418 195
52DLH16	45	52	55000	614 346	601 335	588 324	575 314	563 304	551 294	540 285	528 276	518 267	507 260	497 252	487 245	478 237	468 230	459 224	451 217
52DLH17	52	52	63300	706 395	691 381	676 369	661 357	647 346	634 335	620 324	608 315	595 304	583 296	572 286	560 279	549 270	539 263	528 255	518 247
			66 – 96	**97**	**98**	**99**	**100**	**101**	**102**	**103**	**104**	**105**	**106**	**107**	**108**	**109**	**110**	**111**	**112**
56DLH11	26	56	28100	288 169	283 163	277 158	272 153	267 149	262 145	257 140	253 136	248 133	244 129	239 125	235 122	231 118	227 115	223 113	219 110
56DLH12	30	56	32300	331 184	324 178	318 173	312 168	306 163	300 158	295 153	289 150	284 145	278 141	273 137	268 133	263 130	259 126	254 123	249 119
56DLH13	34	56	39100	401 223	394 216	386 209	379 204	372 197	365 191	358 186	351 181	344 175	338 171	331 166	325 161	319 157	314 152	308 149	303 145
56DLH14	39	56	44200	453 249	444 242	435 234	427 228	419 221	411 214	403 209	396 202	388 196	381 190	375 186	368 181	361 175	355 171	349 167	343 162
56DLH15	42	56	50500	518 281	508 272	498 264	488 256	478 248	469 242	460 234	451 228	443 221	434 215	426 209	419 204	411 198	403 192	396 188	389 182
56DLH16	46	56	54500	559 313	548 304	537 294	526 285	516 277	506 269	496 262	487 254	478 247	469 240	460 233	452 227	444 221	436 214	428 209	420 204
56DLH17	51	56	62800	643 356	630 345	618 335	605 325	594 316	582 306	571 298	560 289	549 281	539 273	529 266	520 258	510 251	501 245	492 238	483 231

DEEP LONGSPAN STEEL JOISTS, DLH-SERIES

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

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

*The safe uniform load for the clear spans shown in the shaded section 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 shaded area, exceed the uniform load calculated for the minimum clear span listed in the shaded area.

To solve for *live* loads for clear spans shown in the shaded area (or lesser clear spans), multiply the live load of the shortest clear span shown in the Load Tables 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.