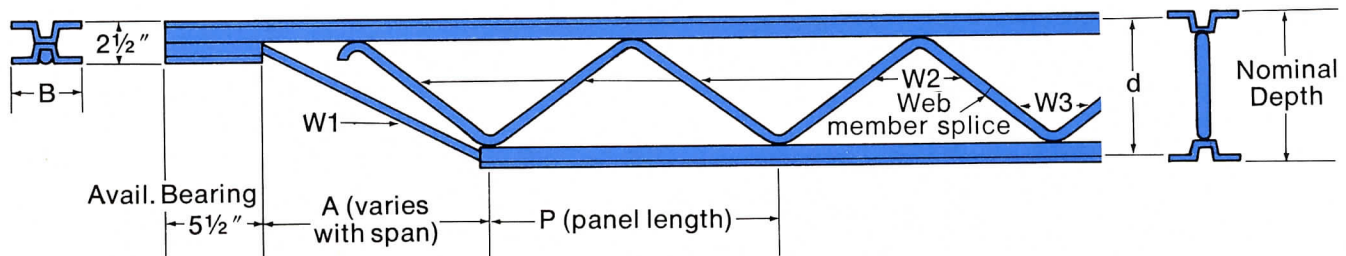


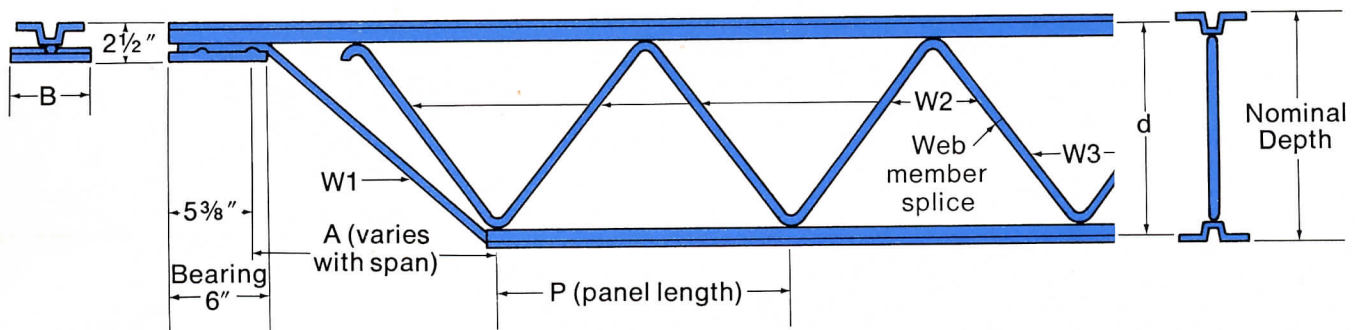
Shortspan Joists Dimensions and Properties

Standard End Details

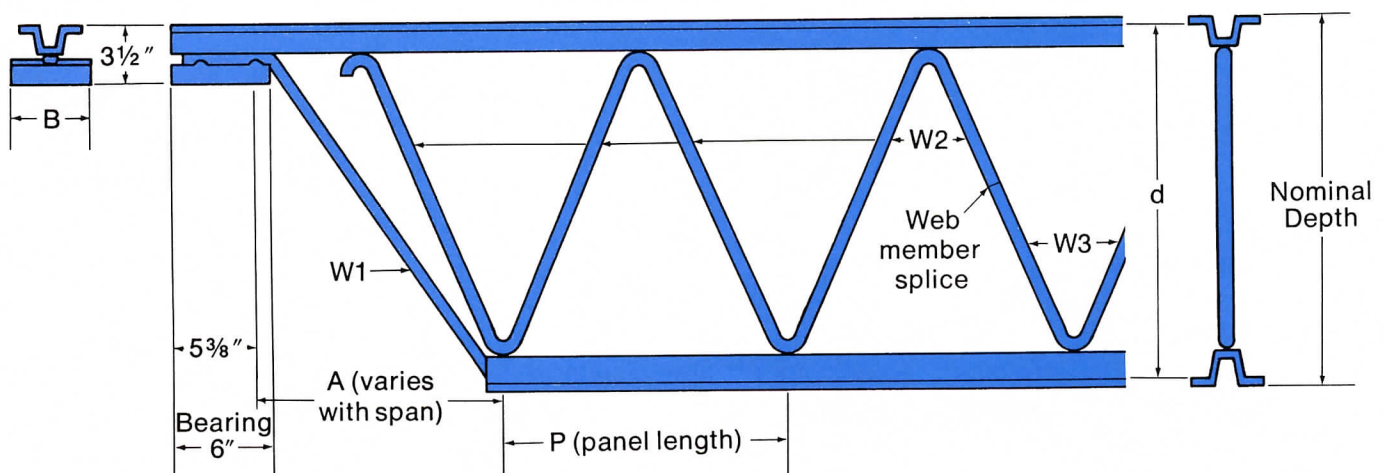
For joist depths 8" through 16"—#3-8 chords



For joist depths 18" through 24"—#5-8 chords

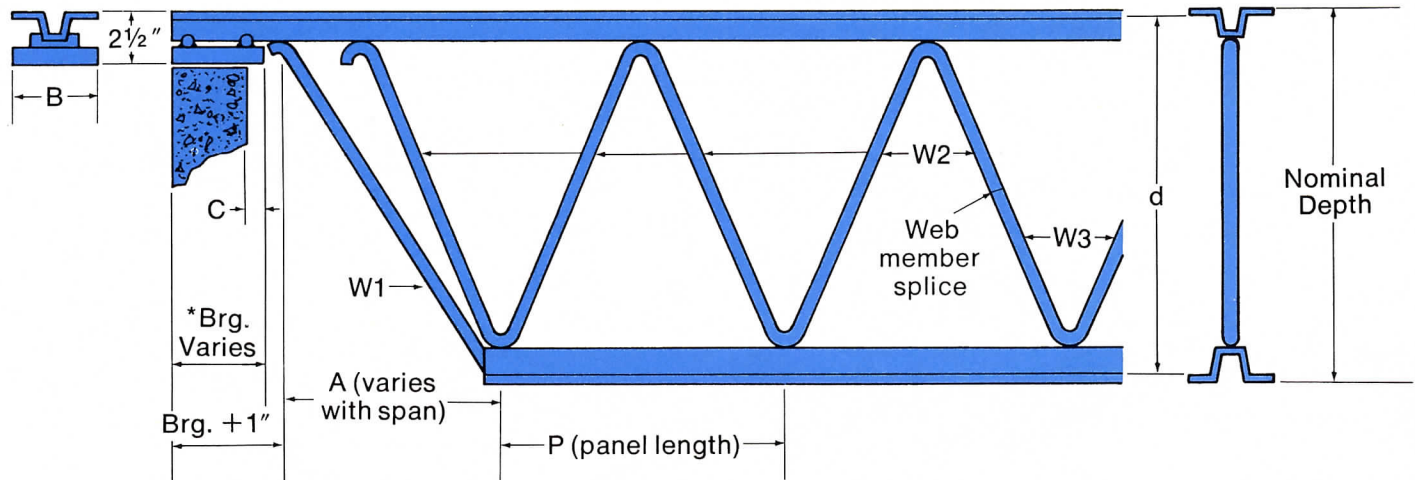


For joist depths 18" through 24"—#9-11 chords
26" through 32"—#8-11 chords

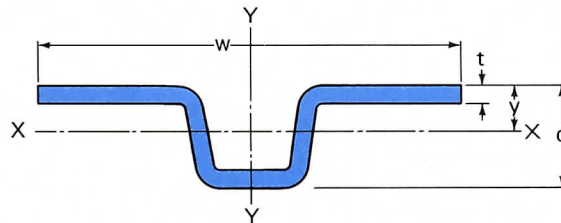


Special End Detail

For joist depths 18" through 24"—#9-11 chords
26" through 32"—#8-11 chords



*Bearing plate length = 3" on steel or concrete and 6" on masonry. CAUTION: WITH THIS SPECIAL END DETAIL THE DIMENSION "C" (THE AMOUNT OF BEARING PLATE OVERHANG BEYOND THE SUPPORT EDGE) MUST NEVER EXCEED 1/2".



Chord Properties

Sect. No.	Area Sq. in.	t in.	d in.	y in.	w in.	X-X Axis		Y-Y Axis		Sect. No.
						I	r	I	r	
101	0.469	.125	1.125	.488	2 ¹¹ / ₁₆	.070	.385	.243	.720	101
102	0.547	.125	1.125	.427	3 ⁵ / ₁₆	.082	.387	.419	.875	102
103	0.570	.125	1.125	.412	3 ¹ / ₂	.085	.386	.487	.924	103
104	0.659	.141	1.141	.407	3 ¹¹ / ₁₆	.099	.387	.619	.969	104
105	0.713	.156	1.156	.422	3 ⁹ / ₁₆	.109	.390	.633	.942	105
106	0.771	.156	1.156	.396	3 ¹⁵ / ₁₆	.115	.386	.838	1.042	106
107	0.844	.188	1.188	.434	3 ⁹ / ₁₆	.133	.396	.761	.950	107
108	0.879	.188	1.188	.421	3 ³ / ₄	.137	.394	.878	1.000	108
109	0.937	.188	1.188	.400	4 ¹ / ₁₆	.143	.390	1.102	1.084	109
110	1.028	.203	1.203	.398	4 ³ / ₁₆	.157	.391	1.296	1.123	110
111	1.055	.188	1.188	.366	4 ¹¹ / ₁₆	.153	.380	1.663	1.256	111
112	1.094	.250	1.250	.451	3 ¹¹ / ₁₆	.184	.410	1.072	.990	112
113	1.234	.250	1.250	.414	4 ¹ / ₄	.198	.401	1.615	1.144	113
115	1.406	.250	1.250	.379	4 ¹⁵ / ₁₆	.212	.388	2.508	1.335	115
211	1.055	.188	1.688	.672	3 ¹⁵ / ₁₆	.342	.570	1.093	1.018	211
214	1.244	.219	1.719	.671	4 ¹ / ₁₆	.412	.576	1.390	1.057	214
215	1.406	.250	1.750	.680	4 ¹ / ₈	.477	.582	1.611	1.070	215
216	1.453	.250	1.750	.662	4 ³ / ₁₆	.491	.581	1.816	1.118	216
217	1.635	.281	1.781	.670	4 ³ / ₈	.564	.588	2.115	1.138	217
218	1.895	.313	1.813	.655	4 ¹¹ / ₁₆	.662	.591	2.844	1.225	218

H-Series

Shortspan Joists Dimensions and Properties

Joist Designation *	Nominal Depth	Effective Depth "d"	Standard Bearing Depth	Section Number		A Varies with Span		Bar Web Diameter			B Brg. Width	P Panel Length	Approx. Wt. Per Foot **	Joist Moment of Inertia ***
				Top Chord	Bottom Chord	Min.	Max.	W1	W2	W3				
H-Series	in.	in.	in.			in.	in.	in.	in.	in.	in.	in.	lbs.	in. ⁴
8H3	8	7.10	2½	103	101	20	31	1³/₁₆	¾	¾	4¼	24	5.0	12.3
10H3	10	9.10	2½	103	101	20	31	1³/₁₆	¾	¾	4¼	24	5.0	19.8
10H4	10	9.15	2½	105	102	20	31	1³/₁₆	¾	¾	4¼	24	6.1	24.5
12H3	12	11.10	2½	103	101	19	30	1³/₁₆	¾	¾	4¼	24	5.2	28.9
12H4	12	11.15	2½	105	102	19	30	1³/₁₆	1¹/₁₆	1¹/₁₆	4¼	24	6.2	37.8
12H5	12	11.17	2½	108	104	19	30	1³/₁₆	1¹/₁₆	1¹/₁₆	4½	24	7.1	44.3
12H6	12	11.21	2½	110	106	19	30	1³/₁₆	1¹/₁₆	1¹/₁₆	5½	24	8.2	52.6
14H3	14	13.10	2½	103	101	18	29	1³/₁₆	¾	¾	4¼	24	5.5	40.1
14H4	14	13.15	2½	105	102	18	29	1³/₁₆	1¹/₁₆	1¹/₁₆	4¼	24	6.5	52.4
14H5	14	13.17	2½	108	104	18	29	1³/₁₆	1¹/₁₆	1¹/₁₆	4½	24	7.4	61.4
14H6	14	13.21	2½	110	106	18	29	1³/₁₆	2³/₃₂	2³/₃₂	5½	24	8.6	73.2
14H7	14	13.19	2½	113	109	18	29	1³/₁₆	¾	¾	5½	24	10.0	86.2
16H4	16	15.17	2½	104	102	19	30	1³/₁₆	1¹/₁₆	1¹/₁₆	4¼	24	6.6	64.5
16H5	16	15.16	2½	107	104	19	30	1³/₁₆	2³/₃₂	2³/₃₂	4½	24	7.8	79.3
16H6	16	15.21	2½	110	106	19	30	1³/₁₆	2³/₃₂	2³/₃₂	5½	24	8.6	93.5
16H7	16	15.19	2½	113	109	19	30	1³/₁₆	¾	¾	5½	24	10.3	112.6
16H8	16	15.26	2½	115	111	19	30	1³/₁₆	2⁵/₃₂	2⁵/₃₂	5½	24	11.4	129.5
18H5	18	17.16	2½	107	104	21	33	1³/₁₆	2³/₃₂	2³/₃₂	4½	24	8.0	101.5
18H6	18	17.21	2½	110	106	21	33	1³/₁₆	¾	¾	5½	24	9.2	119.8
18H7	18	17.19	2½	113	109	21	33	1³/₁₆	2⁵/₃₂	2⁵/₃₂	5½	24	10.4	143.5
18H8	18	17.26	2½	115	111	21	33	1³/₁₆	2⁵/₃₂	2⁵/₃₂	5½	24	11.6	164.3
18H9	18	16.67	3½	216	214	21	33	1¹/₄	1³/₁₆	1³/₁₆	5	24	12.6	179.0
18H10	18	16.65	3½	217	215	21	33	1¹/₄	2⁷/₃₂	2⁷/₃₂	6	24	14.0	202.0
18H11	18	16.68	3½	218	217	21	33	1¹/₄	¾	¾	6	24	15.8	229.0
20H5	20	19.16	2½	107	104	22	34	1³/₁₆	¾	¾	4½	24	8.4	123.9
20H6	20	19.18	2½	109	105	22	34	1³/₁₆	2⁵/₃₂	2⁵/₃₂	5½	24	9.6	141.2
20H7	20	19.17	2½	113	108	22	34	1³/₁₆	2⁵/₃₂	2⁵/₃₂	5½	24	10.7	171.7
20H8	20	19.26	2½	115	111	22	34	1³/₁₆	1³/₁₆	1³/₁₆	5½	24	12.2	206.1
20H9	20	18.67	3½	216	214	22	34	1¹/₄	2⁷/₃₂	2⁷/₃₂	5	24	13.2	224.0
20H10	20	18.65	3½	217	215	22	34	1¹/₄	¾	¾	6	24	14.6	253.0
20H11	20	18.68	3½	218	217	22	34	1¹/₄	5⁹/₆₄	5⁹/₆₄	6	24	16.4	287.0
22H6	22	21.17	2½	108	104	25	37	1³/₁₆	2⁵/₃₂	2³/₃₂	5½	24	9.7	165.1
22H7	22	21.12	2½	112	107	25	37	1³/₁₆	1³/₁₆	¾	5½	24	10.7	200.4
22H8	22	21.22	2½	115	110	25	37	1³/₁₆	1³/₁₆	¾	5½	24	12.0	247.6
22H9	22	20.67	3½	216	214	25	37	1¹/₄	2⁷/₃₂	2⁵/₃₂	5	24	13.8	275.0
22H10	22	20.65	3½	217	215	25	37	1¹/₄	¾	1³/₁₆	6	24	15.2	309.0
22H11	22	20.68	3½	218	217	25	37	1¹/₄	5⁹/₆₄	2⁷/₃₂	6	24	16.9	352.0
24H6	24	23.17	2½	108	104	27	39	1³/₁₆	1³/₁₆	¾	5½	24	10.3	197.6
24H7	24	23.12	2½	112	107	27	39	1³/₁₆	2⁷/₃₂	2⁵/₃₂	5½	24	11.5	238.6
24H8	24	23.22	2½	115	110	27	39	1³/₁₆	2⁷/₃₂	2⁵/₃₂	5½	24	12.7	297.3
24H9	24	22.67	3½	216	214	27	39	1¹/₄	¾	1³/₁₆	5	24	14.0	330.0
24H10	24	22.65	3½	217	215	27	39	1¹/₄	5⁷/₆₄	2⁷/₃₂	6	24	15.5	371.0
24H11	24	22.68	3½	218	217	27	39	1¹/₄	5⁹/₆₄	¾	6	24	17.5	423.0
26H8	26	24.66	3½	214	211	30	42	1¹/₄	¾	1³/₁₆	5	24	12.8	333.0
26H9	26	24.67	3½	216	214	30	42	1¹/₄	5⁷/₆₄	2⁷/₃₂	5	24	14.8	390.0
26H10	26	24.65	3½	217	215	30	42	1¹/₄	5⁹/₆₄	¾	6	24	16.2	439.0
26H11	26	24.68	3½	218	217	30	42	1¹/₄	6¹/₆₄	¾	6	24	17.9	501.0
28H8	28	26.66	3½	214	211	33	45	1¹/₄	5⁷/₆₄	2⁷/₃₂	5	24	13.5	389.0
28H9	28	26.67	3½	216	214	33	45	1¹/₄	5⁹/₆₄	¾	5	24	15.2	455.0
28H10	28	26.65	3½	217	215	33	45	1¹/₄	6¹/₆₄	5⁷/₆₄	6	24	16.8	512.0
28H11	28	26.68	3½	218	217	33	45	1¹/₄	6³/₆₄	5⁹/₆₄	6	24	18.3	586.0
30H8	30	28.66	3½	214	211	33	45	1¹/₄	5⁹/₆₄	¾	5	24	14.2	448.0
30H9	30	28.67	3½	216	214	33	45	1¹/₄	6¹/₆₄	5⁹/₆₄	5	24	15.4	525.0
30H10	30	28.65	3½	217	215	33	45	1¹/₄	6³/₆₄	5⁹/₆₄	6	24	17.3	591.0
30H11	30	28.68	3½	218	217	33	45	1¹/₄	1¹/₆	6¹/₆₄	6	24	18.8	677.0
***32DH9	32	30.67	3½	216	214	33	45	1¹/₄	1¹/₆	6¹/₆₄	6	24	16.6	602.0
***32DH10	32	30.65	3½	217	215	33	45	1¹/₄	1¹/₁₆	6³/₆₄	7	24	18.4	675.0
***32DH11	32	30.68	3½	218	217	33	45	1¹/₄	1¹/₁₆	1¹/₆	7	24	20.1	775.0

*Steel for H-Series joist chords and webs is tested in accordance with "Section 3. Materials" of the SJI Specifications for Open Web Steel Joists, J- and H-Series (Chords: 50,000 psi, minimum yield strength; Webs: 36,000 psi, minimum yield strength).

**The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

***See page 7 for computation of deflections due to uniform loading.

****32"-deep joists are not a standard of SJI, but are designed in strict accordance with the SJI Standard Specifications for J- and H-Series Joists. These additional special sizes, up to 64' long, are offered for a greater range selection.

Shortspan Joists Standard Load Table

Allowable Total Safe Load In Pounds Per Linear Foot

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

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

The blue figures in this load 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 blue figures by 1.5. In no case shall the total load capacity of the joist be exceeded.**

**—Section 5.9 of the "Specifications for Open Web Steel Joists J- & H-Series" limits the design LIVE load deflection as follows:
Floors—1/360 of span. Roofs—1/360 of span where a plaster ceiling is attached or suspended; 1/240 of span for all other cases.

Joist Designation	8H3	10H3	10H4	12H3	12H4	12H5	12H6	14H3	14H4	14H5	14H6	14H7	16H4	16H5	16H6	16H7	16H8
Nominal *Depth (in.)	8	10	10	12	12	12	12	14	14	14	14	14	16	16	16	16	16
Resist. Moment (in.-kips)	91	116	148	140	180	222	260	165	212	259	307	369	221	289	344	413	478
Max. End React. (lbs.)	2400	2500	2800	2800	3200	3600	3900	3200	3500	3800	4200	4600	3800	4300	4600	4900	5200
†Approx. Wt. (lbs./ft.)	5.0	5.0	6.1	5.2	6.2	7.1	8.2	5.5	6.5	7.4	8.6	10.0	6.6	7.8	8.6	10.3	11.4
Span in Feet																	
8	600																
9	533																
10	480 460	500	560														
11	436 345	455	509														
12	400 266	417	467	467	533	600	650										
13	359 209	385 337	431 417	431	492	554	600										
14	310 167	357 270	400 334	400 393	457	514	557	457	500	543	600	657					
15	270 136	333 219	373 271	373 320	427 418	480	520	427	467	507	560	613					
16	232 112	302 181	350 223	350 264	400 345	450 404	488 480	400 366	438	475	525	575	475	538	575	613	650
17	268 151	329 186	323 220	376 287	424 337	459 400	376 305	412 398	447	494	541	511	447	506	541	576	612
18	239 127	305 157	288 185	356 242	400 284	433 337	340 257	389 336	422 393	467	511	511	422 413	478	511	544	578
19	214 108	273 133	259 157	332 206	379 241	411 286	305 218	368 285	400 334	442 399	484 470	484	400 351	453 432	484	516	547
20	193 92	247 114	233 135	300 177	360 207	390 246	275 187	350 245	380 287	420 342	460 403	460	368 301	430 370	460 437	490	520
21				212 117	272 152	336 179	371 212	249 162	320 212	362 248	400 295	438 348	334 260	410 320	438 377	467 454	495
22				193 101	248 133	306 155	355 185	227 141	292 184	345 215	382 257	418 302	304 226	391 278	418 328	445 395	473 454
23				176 89	227 116	280 136	328 162	208 123	267 161	326 189	365 225	400 265	279 198	364 243	400 287	426 346	452 398
24				162 78	208 102	257 120	301 142	191 108	245 142	300 166	350 198	383 233	256 174	334 214	383 253	408 304	433 350
25								176 96	226 125	276 147	327 175	368 206	236 154	308 190	367 224	392 269	416 310
26								163 85	209 111	255 131	303 156	354 183	218 137	285 169	339 199	377 239	400 275
27								151 76	194 99	237 117	281 139	337 164	202 122	264 151	315 177	363 214	385 246
28								140 68	180 89	220 104	261 125	314 147	188 110	246 135	293 159	350 192	371 220
29													175 99	229 121	273 143	327 172	359 198
30													164 89	214 110	255 129	306 156	347 179
31													153 81	200 99	239 117	287 141	332 162
32													144 74	188 90	224 107	269 128	311 148

LOADS ABOVE HEAVY LINES ARE GOVERNED BY SHEAR.
LOADS BELOW DASHED LINES ARE TO BE USED FOR ROOF CONSTRUCTION ONLY.

*Indicates Nominal Depth of Steel Joists only.

†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

Standard Load Tables copyright by Steel Joist Institute. Reprinted by permission.

H-Series

Shortspan Joists Standard Load Table

Allowable Total Safe Load In Pounds Per Linear Foot

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

Joist Designation	18H5	18H6	18H7	18H8	18H9	18H10	18H11	20H5	20H6	20H7	20H8	20H9	20H10	20H11	22H6	22H7	22H8	22H9	22H10	22H11
Nominal *Depth (in.)	18	18	18	18	18	18	18	20	20	20	20	20	20	20	22	22	22	22	22	22
Resist. Moment (in.-kips)	325	383	466	540	627	705	814	365	406	499	602	701	789	912	422	526	653	776	873	1,009
Max. End React. (lbs.)	4500	4800	5200	5400	5900	6600	7600	4800	5100	5400	5600	6400	7000	7900	5400	5600	5800	6700	7200	8100
†Approx. Wt. (lbs./ft.)	8.0	9.2	10.4	11.6	12.6	14.0	15.8	8.4	9.6	10.7	12.2	13.2	14.6	16.4	9.7	10.7	12.0	13.8	15.2	16.9
Span in Feet	18	18	18	18	18	18	18	20	20	20	20	20	20	20	22	22	22	22	22	22
19	474	505	547	568	621															
20	450	480	520	540	590			480	510	540	560	640								
21	429 409	457	495	514	562	629		457	486	514	533	610								
22	409 356	436 420	473	491	536	600		436	464	491	509	582	636		491	509	527	609		
23	391 312	417 368	452 441	470	513	574		417 380	443 434	470	487	557	609		470	487	504	583	626	
24	375 274	400 324	433 388	450 444	492 484	550 546	633 619	400 335	425 382	450	467	533	583		450 446	467	483	558	600	
25	347 243	384 286	416 343	432 393	472 428	528 483	608 548	384 296	408 338	432 411	448	512	560	632	432 395	448	464	536	576	648
26	321 216	369 255	400 305	415 349	454 380	508 429	585 487	360 263	392 300	415 365	431	492 476	538	608	415 351	431 426	446	515	554	623
27	297 193	350 227	385 272	400 312	437 340	489 383	563 435	334 235	371 268	400 326	415 392	474 425	519 480	585 545	386 313	415 380	430	496	533	600
28	276 173	326 204	371 244	386 280	421 305	471 344	543 390	310 211	345 240	386 292	400 352	457 381	500 431	564 488	359 281	400 341	414	479 468	514	579
29	258 155	304 184	359 220	372 252	407 274	455 309	524 351	289 190	322 216	372 263	386 317	441 343	483 388	545 440	335 253	386 307	400 379	462 421	497 473	559 539
30	241 140	284 166	345 199	360 227	393 248	440 280	507 317	270 171	301 195	360 238	373 286	427 310	467 350	527 397	313 228	373 277	387 343	441 387	480 428	540 487
31	225 127	266 150	323 180	348 206	381 224	426 253	490 287	253 155	282 177	346 215	361 259	413 281	452 317	510 360	293 207	361 251	374 311	432 345	465 387	523 441
32	212 116	249 137	303 164	338 187	369 204	413 230	475 261	238 141	264 161	325 196	350 236	400 255	438 288	494 327	275 188	342 228	363 282	419 314	450 352	506 401
33	199 106	234 125	285 149	327 171	358 186	400 210	461 238	223 129	249 147	305 178	339 215	388 233	424 263	479 298	258 172	322 208	352 257	406 286	436 321	491 366
34	187 96	221 114	269 136	311 156	347 170	388 192	447 218	210 118	234 134	288 163	329 196	376 213	412 240	465 273	243 157	303 190	341 235	394 261	424 294	476 335
35	177 88	208 104	254 125	294 143	337 156	377 176	434 200	199 108	221 123	272 150	320 180	366 195	400 220	451 250	230 144	286 175	331 216	383 240	411 269	463 307
36	167 81	197 96	240 115	278 132	323 143	363 162	419 183	188 99	209 113	257 137	310 166	356 179	389 203	439 230	217 132	271 160	322 198	372 220	400 247	450 282
37								178 91	198 104	243 127	293 152	341 165	378 187	427 212	206 122	256 148	314 183	362 203	389 228	438 260
38								169 84	187 96	230 117	278 141	324 153	364 172	416 195	195 112	243 136	301 169	353 187	379 210	426 240
39								160 78	178 89	219 108	264 130	307 141	346 159	400 181	185 104	231 126	286 156	340 173	369 195	415 222
40								152 72	169 82	208 100	251 121	292 131	329 148	380 168	176 96	219 117	272 145	323 161	360 180	405 205
41															167 89	209 109	259 134	308 149	346 167	395 191
42															159 83	199 101	247 125	293 139	330 156	381 177
43															152 78	190 94	235 116	280 129	315 145	364 165
44															145 72	181 88	225 109	267 121	301 136	347 154

*Indicates Nominal Depth of Steel Joists only.

†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

LOADS ABOVE HEAVY LINES ARE GOVERNED BY SHEAR.

LOADS BELOW DASHED LINES ARE TO BE USED FOR ROOF CONSTRUCTION ONLY.

Tests on steel joists designed in accordance with the Standard Specifications have demonstrated that the Standard Load Tables are applicable for concentrated top chord loadings (such as are developed in bulb-tee roof construction) when the sum of the equal concentrated top chord loadings does not exceed the allowable uniform loading for the joist type and span and the loads are placed at spacings not exceeding 33" along the top chord.

H-Series

Shortspan Joists Standard Load Table

Allowable Total Safe Load In Pounds Per Linear Foot

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

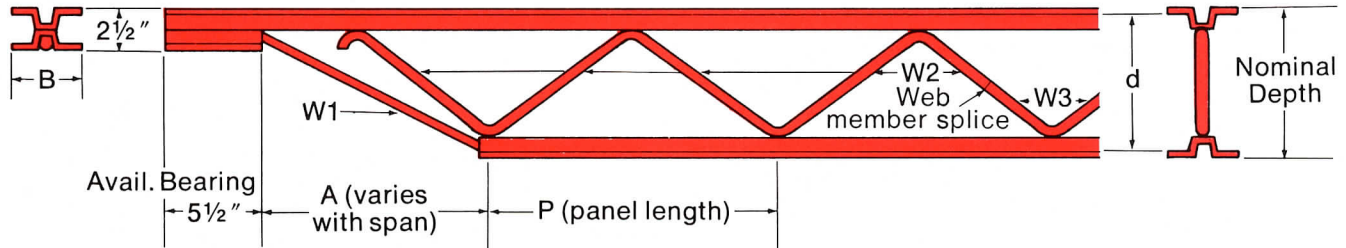
Joist Designation	24H6	24H7	24H8	24H9	24H10	24H11	26H8	26H9	26H10	26H11	28H8	28H9	28H10	28H11	30H8	30H9	30H10	30H11	32DH9	32DH10	32DH11
Nominal*Depth (in.)	24	24	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30	32	32	32
Resist. Moment (in.-Kips)	462	576	716	851	957	1,106	784	925	1,040	1,203	846	1,000	1,124	1,300	909	1,075	1,207	1,397	1,149	1,291	1,494
Max. End React. (lbs.)	5600	5800	6000	7000	7500	8200	6700	7200	7600	8300	6700	7200	7700	8400	6800	7500	8100	8700	8600	9200	10300
†Approx. Wt. (lbs./ft.)	10.3	11.5	12.7	14.0	15.5	17.5	12.8	14.8	16.2	17.9	13.5	15.2	16.8	18.3	14.2	15.4	17.3	18.8	17	18	20
Span in Feet																					
24	467	483	500	583	625																
25	448	464	480	560	600																
26	431	446	462	538	577	631	515	554	585	638											
27	415 375	430	444	519	556	607	496	533	563	615											
28	393 336	414 406	429	500	536	586	479	514	543	593	479	514	550	600							
29	366 303	400 365	414	483	517	566	462	497	524	572	462	497	531	579							
30	342 273	387 330	400	467 457	500	547	447	480	507	553	447	480	513	560	453	500	540	580			
31	320 248	374 299	387 373	452 414	484 465	529	432 418	465	490	535	432	465	497	542	439	484	523	561			
32	301 225	363 272	375 339	438 376	469 423	513 482	419 380	450 445	475	519	419	450	481	525	425	469	506	544	538	575	644
33	283 205	352 248	364 309	424 343	455 386	497 440	406 346	436 405	461 456	503	406 404	436	467	509	412	455	491	527	521	558	624
34	266 188	332 227	353 283	412 314	441 353	482 402	394 317	424 340	447 383	474 437	383 339	411 396	440	480	389	429	463	497	491	526	589
35	251 172	313 208	343 259	400 288	429 323	469 369	383 290	411 340	434 383	474 437	383 339	411 396	440	480	389	429	463	497	491	526	589
36	238 158	296 191	333 238	389 264	417 297	456 339	372 267	400 312	422 352	461 401	372 311	400 364	428 410	467	378 359	417	450	483	478	511	572
37	225 146	280 176	324 219	378 243	405 274	443 312	362 246	389 288	411 324	449 370	362 287	389 336	416 378	454 432	368 330	405 387	438 436	470	465 443	497	557
38	213 135	266 162	316 202	368 225	395 253	432 288	353 227	379 266	400 299	437 341	353 265	379 310	405 349	442 399	358 305	395 357	426 402	458	453 409	484 460	542 528
39	202 124	252 150	308 187	359 208	385 234	421 266	344 210	369 246	390 276	426 315	344 245	369 287	395 322	431 369	349 282	385 331	415 372	446 426	441 378	472 426	528 488
40	193 115	240 139	298 174	350 193	375 217	410 247	327 194	360 228	380 256	415 292	335 227	360 266	385 299	420 342	340 262	375 306	405 345	435 395	430 350	460 395	515 452
41	183 107	228 129	284 161	337 179	366 201	400 229	311 181	351 211	371 238	405 272	327 211	351 247	376 278	410 318	332 243	366 285	395 320	424 367	420 325	449 366	502 420
42	175 100	218 120	271 150	322 166	357 187	390 213	296 168	343 197	362 221	395 253	319 196	343 229	367 258	400 295	324 226	357 265	386 298	414 341	410 303	438 341	490 391
43	167 93	208 112	258 140	307 155	345 174	381 199	283 156	334 183	353 206	386 235	305 183	335 214	358 241	391 275	316 211	349 247	377 278	405 318	428 282	479 318	536 364
44	159 87	198 105	247 130	293 145	330 163	373 186	270 146	319 171	345 193	377 220	291 171	327 200	350 225	382 257	309 196	341 230	368 259	395 297	418 263	468 296	528 340
45	152 81	190 98	236 122	280 135	315 152	364 173	258 137	305 160	338 180	369 205	279 159	320 187	342 210	373 240	299 184	333 215	360 242	387 287	409 246	458 277	515 318
46	146 76	181 92	226 114	268 127	302 142	348 162	247 128	291 150	328 168	361 192	267 149	313 175	335 197	365 225	286 172	326 202	352 227	378 260	400 230	448 259	502 297
47	139 71	174 86	216 107	257 119	289 133	334 152	237 120	279 140	314 158	353 180	255 140	302 164	328 184	357 211	274 161	319 189	345 213	370 244	390 216	438 243	490 279
48	134 67	167 81	207 100	246 111	277 125	320 143	227 112	268 132	301 148	346 169	245 131	289 154	321 173	350 198	263 151	311 177	338 200	363 229	392 203	429 228	488 262
49							218 106	257 124	289 139	334 159	235 124	278 144	312 163	343 186	252 142	298 167	331 188	355 215	319 191	358 215	415 246
50							209 100	247 117	277 131	321 150	226 116	267 136	300 153	336 175	242 134	287 157	322 177	348 202	306 179	344 202	398 232
51							201 94	237 110	267 124	308 141	217 110	256 128	288 144	329 165	233 126	276 148	309 166	341 191	295 169	331 190	383 218
52							193 88	228 104	256 117	297 133	209 103	247 121	277 136	321 156	224 119	265 139	298 157	335 180	283 159	318 180	368 206
53											201 98	237 114	267 128	309 147	216 112	255 132	286 148	328 170	273 151	306 170	355 194
54											193 92	229 108	257 121	297 139	208 106	246 125	276 140	319 161	263 142	295 160	342 184
55											186 87	220 102	248 115	287 132	200 101	237 118	266 133	308 152	253 135	285 152	329 174
56											180 83	213 97	239 109	276 125	193 95	229 112	257 126	297 144	244 128	274 144	318 165
57															187 90	221 106	248 119	287 137	236 121	265 136	307 156
58															180 86	213 101	239 113	277 130	228 115	256 129	296 148
59															174 81	206 95	231 108	268 123	220 109	247 123	286 141
60															168 77	199 91	224 102	259 117	213 104	239 117	277 134
61																			206 99	231 111	268 128
62																			199 94	224 106	259 121
63																			193 90	217 101	251 116
64																			187 86	210 96	243 110

*Indicates Nominal Depth of Steel Joists only.
†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

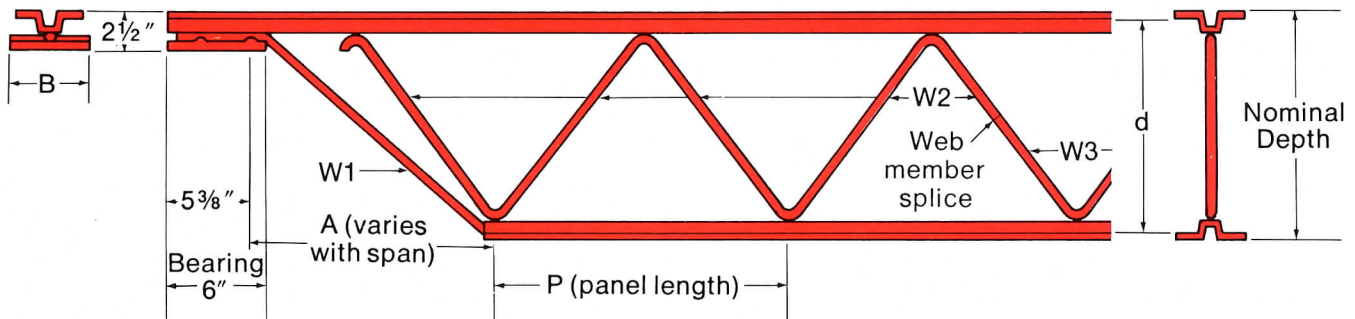
LOADS ABOVE HEAVY LINES ARE GOVERNED BY SHEAR.
LOADS BELOW DASHED LINES ARE TO BE USED FOR ROOF CONSTRUCTION ONLY.

Standard End Details

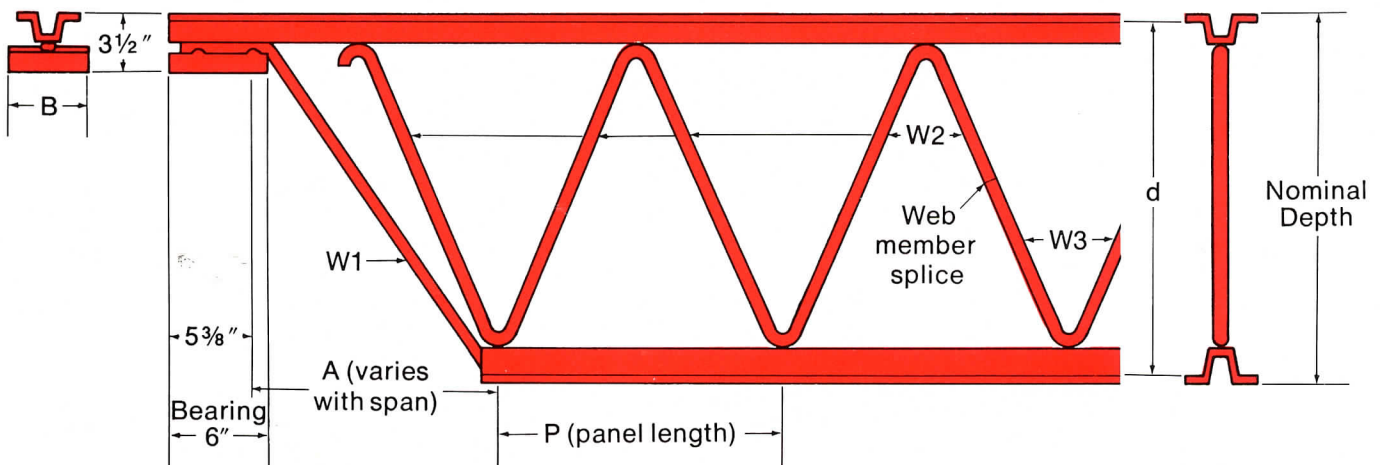
For joist depths 8" through 16"—#3-8 chords



For joist depths 18" through 24"—#5-8 chords



For joist depths 18" through 24"—#9-11 chords
26" through 30"—#8-11 chords



J-Series

Shortspan Joists Dimensions and Properties

Joist Designation *	Nominal Depth	Effective Depth "d"	Standard Bearing Depth	Section Number		A Varies with Span		Bar Web Diameter			B Brg. Width	P Panel Length	Approx. Wt. Per Foot ***	Joist Moment of Inertia ***
				Top Chord	Bottom Chord	Min.	Max.	W1	W2	W3				
J-Series	in.	in.	in.			in.	in.	in.	in.	in.	in.	in.	lbs.	in. ⁴
8J3	8	7.10	2½	103	101	20	31	13/16	¾	¾	4¼	24	4.8	12.3
10J3	10	9.10	2½	103	101	20	31	13/16	¾	¾	4¼	24	4.8	19.8
10J4	10	9.15	2½	105	102	20	31	13/16	¾	¾	4¼	24	6.0	24.5
12J3	12	11.10	2½	103	101	19	30	13/16	¾	¾	4¼	24	5.1	28.9
12J4	12	11.15	2½	105	102	19	30	13/16	¾	¾	4¼	24	6.0	37.8
12J5	12	11.16	2½	107	104	19	30	13/16	¾	¾	4¼	24	7.0	44.3
12J6	12	11.17	2½	110	107	19	30	13/16	¾	¾	5½	24	8.1	52.6
14J3	14	13.10	2½	103	101	18	29	13/16	¾	¾	4¼	24	5.2	40.1
14J4	14	13.15	2½	105	102	18	29	13/16	¾	¾	4¼	24	6.4	52.4
14J5	14	13.16	2½	107	104	18	29	13/16	¾	¾	4¼	24	7.3	61.4
14J6	14	13.17	2½	110	107	18	29	13/16	11/16	11/16	5½	24	8.4	73.2
14J7	14	13.19	2½	113	110	18	29	13/16	11/16	11/16	5½	24	9.7	86.2
16J4	16	15.17	2½	104	102	19	30	13/16	¾	¾	4¼	24	6.6	64.5
16J5	16	15.16	2½	107	104	19	30	13/16	11/16	11/16	4¾	24	7.6	79.3
16J6	16	15.21	2½	110	106	19	30	13/16	11/16	11/16	5½	24	8.5	93.5
16J7	16	15.19	2½	113	109	19	30	13/16	11/16	11/16	5½	24	10.1	112.6
16J8	16	15.17	2½	115	112	19	30	13/16	23/32	23/32	5½	24	11.3	129.5
18J5	18	17.16	2½	107	104	21	33	13/16	11/16	11/16	4¾	24	7.9	101.5
18J6	18	17.21	2½	110	106	21	33	13/16	11/16	11/16	5½	24	9.0	119.8
18J7	18	17.19	2½	113	109	21	33	13/16	23/32	23/32	5½	24	10.2	143.5
18J8	18	17.17	2½	115	112	21	33	13/16	¾	¾	5½	24	11.3	164.3
18J9	18	16.66	3½	216	215	21	33	1½/4	¾	¾	5	24	12.4	179.0
18J10	18	16.65	3½	217	215	21	33	1½/4	25/32	25/32	6	24	13.8	202.0
18J11	18	16.68	3½	218	217	21	33	1½/4	13/16	13/16	6	24	15.6	229.0
20J5	20	19.16	2½	107	104	22	34	13/16	23/32	23/32	4¾	24	8.1	123.9
20J6	20	19.21	2½	110	106	22	34	13/16	23/32	23/32	5½	24	9.2	141.2
20J7	20	19.19	2½	113	109	22	34	13/16	¾	¾	5½	24	10.6	171.7
20J8	20	19.17	2½	115	112	22	34	13/16	¾	¾	5½	24	11.9	206.5
20J9	20	18.66	3½	216	215	22	34	1½/4	25/32	25/32	5	24	12.8	224.0
20J10	20	18.65	3½	217	215	22	34	1½/4	25/32	25/32	6	24	14.4	253.0
20J11	20	18.68	3½	218	217	22	34	1½/4	13/16	13/16	6	24	16.1	287.0
22J6	22	21.18	2½	109	105	25	37	13/16	¾	11/16	5½	24	9.6	165.1
22J7	22	21.19	2½	113	109	25	37	13/16	¾	11/16	5½	24	10.5	200.4
22J8	22	21.26	2½	115	111	25	37	13/16	25/32	23/32	5½	24	11.9	247.6
22J9	22	20.66	3½	216	215	25	37	1½/4	25/32	23/32	5	24	13.1	275.0
22J10	22	20.65	3½	217	215	25	37	1½/4	13/16	13/16	6	24	14.4	309.0
22J11	22	20.68	3½	218	217	25	37	1½/4	27/32	25/32	6	24	16.4	352.0
24J6	24	23.18	2½	109	105	27	39	13/16	25/32	11/16	5½	24	9.9	197.6
24J7	24	23.19	2½	113	109	27	39	13/16	25/32	23/32	5½	24	11.1	238.6
24J8	24	23.26	2½	115	111	27	39	13/16	13/16	¾	5½	24	12.4	297.3
24J9	24	22.66	3½	216	215	27	39	1½/4	13/16	¾	5	24	13.3	330.0
24J10	24	22.65	3½	217	215	27	39	1½/4	27/32	25/32	6	24	14.8	371.0
24J11	24	22.68	3½	218	217	27	39	1½/4	27/32	13/16	6	24	16.7	423.0
26J8	26	24.66	3½	214	211	30	42	1½/4	27/32	25/32	5	24	12.2	333.0
26J9	26	24.66	3½	216	215	30	42	1½/4	27/32	25/32	5	24	14.1	390.0
26J10	26	24.65	3½	217	215	30	42	1½/4	¾	13/16	6	24	15.4	439.0
26J11	26	24.68	3½	218	217	30	42	1½/4	¾	27/32	6	24	17.1	501.0
28J8	28	26.66	3½	214	211	33	45	1½/4	¾	13/16	5	24	13.0	389.0
28J9	28	26.67	3½	216	214	33	45	1½/4	¾	13/16	5	24	14.3	455.0
28J10	28	26.65	3½	217	215	33	45	1½/4	5/64	27/32	6	24	15.9	512.0
28J11	28	26.68	3½	218	217	33	45	1½/4	5/64	¾	6	24	17.9	586.0
30J8	30	28.66	3½	214	211	33	45	1½/4	5/64	27/32	5	24	13.8	448.0
30J9	30	28.66	3½	216	215	33	45	1½/4	5/64	¾	5	24	14.9	525.0
30J10	30	28.65	3½	217	215	33	45	1½/4	5/64	¾	6	24	16.6	591.0
30J11	30	28.68	3½	218	217	33	45	1½/4	61/64	57/64	6	24	18.3	677.0

*Steel for J-Series joist chords and webs is tested in accordance with "Section 3, Materials" of the SJI Specifications for Open Web Steel Joists, J- and H-Series (36,000 psi minimum yield strength).

**The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

***See page 7 for computation of deflections due to uniform loading.

Shortspan Joists Standard Load Table

Allowable Total Safe Load In Pounds Per Linear Foot

Based on a Maximum Allowable Tensile Stress of 22,000 psi

The black figures in the following table give the TOTAL safe uniformly distributed load-carrying capacities, in pounds per linear foot, of J-Series Steel Joists. The weight of DEAD Loads, including the joists, must be deducted to determine the LIVE load-carrying capacities of the joists. The load table may be used for parallel chord joists installed to a maximum slope of 1/2-inch per foot.

The red figures in this load 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 joist be exceeded.**

**Section 5.9 of the "Standard Specifications for Open Web Steel Joists, J- and H-Series" limits the design LIVE load deflection as follows: FLOORS, 1/360 span. ROOFS, 1/360 of span where a plaster ceiling is attached or suspended; 1/240 of span for all other cases.

Joist Designation	8J3	10J3	10J4	12J3	12J4	12J5	12J6	14J3	14J4	14J5	14J6	14J7	16J4	16J5	16J6	16J7	16J8
Nominal *Depth (in.)	8	10	10	12	12	12	12	14	14	14	14	14	16	16	16	16	16
Resist. Moment (in.-kips)	70	89	111	108	135	161	196	127	159	190	230	276	173	216	258	310	359
Max. End React. (lbs.)	2000	2200	2400	2300	2500	2700	3000	2400	2800	3100	3400	3700	3000	3300	3600	4000	4300
†Approx. Wt. (lbs./ft.)	4.8	4.8	6.0	5.1	6.0	7.0	8.1	5.2	6.4	7.3	8.4	9.7	6.6	7.6	8.5	10.1	11.3
Span in Feet	500																
8	444																
9	400	440	480														
10	364	400	436														
11	324	367	400	383	417	450	500										
12	276	338	369	354	385	415	462										
13	238	303	343	329	357	386	429	343	400	443	486	529					
14	207	264	320	307	333	360	400	320	373	413	453	493					
15	182	232	289	281	313	338	375	300	350	388	425	463	375	413	450	500	538
16	151	205	256	249	294	318	353	282	329	365	400	435	353	388	424	471	506
17	127	183	228	222	278	300	333	261	311	344	378	411	333	367	400	444	478
18	108	164	205	199	249	284	316	235	294	326	358	389	316	347	379	421	453
19	92	148	185	180	225	268	300	212	265	310	340	370	288	330	360	400	430
20		117	163	163	204	243	286	192	240	287	324	352	262	314	343	381	410
21		101	149	186	222	270	316	175	219	262	309	336	238	298	327	364	391
22		89	136	170	203	247	293	160	200	239	290	322	218	272	313	348	374
23		78	125	156	186	227	273	147	184	220	266	308	200	250	299	333	358
24			102	142	180	222	270	135	170	203	245	294	185	230	275	320	344
25								96	125	157	197	246	154	199	244	289	310
26								85	111	131	166	215	137	171	213	254	275
27								76	99	117	139	164	122	151	188	223	246
28								68	89	104	125	147	110	135	169	204	220
29													99	121	143	172	198
30													89	110	129	156	179
31													81	99	117	141	162
32													74	90	107	128	148

LOADS ABOVE HEAVY LINES ARE GOVERNED BY SHEAR.

*Indicates Nominal Depth of Steel Joists only.

†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

Standard Load Tables copyright by Steel Joist Institute. Reprinted by permission.

J-Series**Shortspan Joists
Standard Load Table****Allowable Total Safe Load In Pounds Per Linear Foot**

Based on a Maximum Allowable Tensile Stress of 22,000 psi

Joist Designation	18J5	18J6	18J7	18J8	18J9	18J10	18J11	20J5	20J6	20J7	20J8	20J9	20J10	20J11	22J6	22J7	22J8	22J9	22J10	22J11
Nominal *Depth (in.)	18	18	18	18	18	18	18	20	20	20	20	20	20	20	22	22	22	22	22	22
Resist. Moment (in.-kips)	243	293	352	406	462	517	597	265	316	382	455	517	579	669	335	420	493	572	640	741
Max. End React. (lbs.)	3500	3900	4200	4500	4900	5300	5900	3800	4100	4300	4600	5000	5400	6000	4200	4500	4800	5300	5700	6200
†Approx. Wt. (lbs. ft.)	7.9	9.0	10.2	11.3	12.4	13.8	15.6	8.1	9.2	10.6	11.9	12.8	14.4	16.1	9.6	10.5	11.9	13.1	14.4	16.4
Span in Feet																				
18	389	433	467	500	544	589														
19	368	411	442	474	516	558	621													
20	350	390	420	450	490	530	590	380	410	430	460	500	540	600						
21	333	371	400	429	467	505	562	362	390	410	438	476	514	571						
22	318	355	382	409	445	482	536	345	373	391	418	455	491	545	382	409	436	482	518	564
23	304	339	365	391	426	461	513	330	357	374	400	435	470	522	365	391	417	461	496	539
24	281 274	325 324	350	375	408	442	492	307	342	358	383	417	450	500	350	375	400	442	475	517
25	259 243	312 286	336	360	392	424	472	283	328	344	368	400	432	480	336	360	384	424	456	496
26	240 216	289 255	323 305	346	377	408	454	261	312 300	331	354	385	415	462	323	346	369	408	438	477
27	222 193	268 227	311 272	333 312	363 340	393 383	437 435	242 235	289 268	319	341	370	400	444	306	333	356	393	422	459
28	207 173	249 204	299 244	321 280	350 305	379 344	421 390	225 111	269 240	307 292	329	357	386	429	285 281	321	343	379	407	443
29	193 155	232 184	279 220	310 252	338 274	366 309	407 351	210 190	250 216	297 263	317	345 343	372	414	266 253	310 307	331	366	393	428
30	180 140	217 166	261 199	300 227	327 248	353 280	393 317	196 171	234 195	283 238	307 286	333 310	360 350	400 397	248 228	300 277	320	353	380	413
31	169 127	203 150	244 180	282 206	316 224	342 253	381 287	184 155	219 177	265 215	297 259	323 281	348 317	387 360	232 207	290 251	310	342	368	400
32	158 116	191 137	229 164	264 187	301 204	331 230	369 261	173 141	206 161	249 196	288 236	313 255	338 288	375 327	218 188	273 228	300 282	331 314	356 352	388
33	149 106	179 125	215 149	249 171	283 186	316 210	358 238	162 129	193 147	234 178	279 215	303 233	327 263	364 298	205 172	257 208	291 257	321 286	345 321	376 366
34	140 96	169 114	203 136	234 156	266 170	298 192	344 218	153 118	182 134	220 163	262 196	294 213	318 240	353 273	193 157	242 190	282 235	312 261	335 294	365 335
35	132 88	159 104	192 125	221 143	251 156	281 176	325 200	144 108	172 123	208 150	248 180	281 195	309 220	343 250	182 144	229 175	268 216	303 240	326 269	354 307
36	125 81	151 96	181 115	209 132	238 143	266 162	307 183	136 99	163 113	197 137	234 166	266 179	298 203	333 230	172 132	216 160	254 198	294 220	317 247	344 282
37								129 91	154 104	186 127	222 152	252 165	282 187	324 212	163 122	205 148	240 183	279 203	308 228	335 260
38								122 84	146 96	176 117	210 141	239 153	267 172	309 195	155 112	194 136	228 169	264 187	295 210	326 240
39								116 78	139 89	167 108	199 130	227 141	254 159	293 181	147 104	184 126	216 156	251 173	281 195	318 222
40								110 72	132 82	159 100	190 121	215 131	241 148	279 168	140 96	175 117	205 145	238 161	267 180	309 205
41															133 89	167 109	196 134	227 149	254 167	294 191
42															127 83	159 101	186 125	216 139	242 156	280 177
43															121 78	151 94	178 116	206 129	231 145	267 165
44															115 72	145 88	170 109	197 121	220 136	255 154

Loads Above Heavy Lines Are Governed By Shear.

Tests on steel joists designed in accordance with the Standard Specifications have demonstrated that the Standard Load Tables are applicable for concentrated top chord loadings (such as are developed in bulb-tee roof construction) when the sum of the equal concentrated top chord loadings does not exceed the allowable uniform loading for the joist type and span and the loads are placed at spacings not exceeding 33" along the top chord.

*Indicates Nominal Depth of Steel Joists only.

†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

Shortspan Joists Standard Load Table

Allowable Total Safe Load In Pounds Per Linear Foot

Based on a Maximum Allowable Tensile Stress of 22,000 psi

Joist Designation	24J6	24J7	24J8	24J9	24J10	24J11	26J8	26J9	26J10	26J11	28J8	28J9	28J10	28J11	30J8	30J9	30J10	30J11
Nominal *Depth (in.)	24	24	24	24	24	24	26	26	26	26	28	28	28	28	30	30	30	30
Resist. Moment (in.-Kips)	367	460	540	627	701	813	574	682	763	885	621	737	824	957	667	793	885	1,029
Max. End React. (lbs.)	4400	4700	5000	5600	5900	6400	5400	5900	6300	6800	5700	6200	6600	7100	5900	6400	6800	7400
†Approx. Wt. (lbs./ft.)	9.9	11.1	12.4	13.3	14.8	16.7	12.2	14.1	15.4	17.1	13.0	14.3	15.9	17.9	13.8	14.9	16.6	18.3
Span in Feet																		
24	367	392	417	467	492	533												
25	352	376	400	448	472	512												
26	338	362	385	431	454	492	415	454	485	523								
27	326	348	370	415	437	474	400	437	467	504								
28	312	336	357	400	421	457	386	421	450	486	407	443	471	507				
29	291	324	345	386	407	441	372	407	434	469	393	428	455	490				
30	272	313	333	373	393	427	360	393	420	453	380	413	440	473	393	427	453	493
31	255 248	303 299	323	361	381	413	348	381	406	439	368	400	426	458	381	413	439	477
32	239 225	294 272	313	350	369	400	338	369	394	425	356	388	413	444	369	400	425	463
33	225 205	282 248	303	339	358	388	327	358	382	412	345	376	400	430	358	388	412	448
34	212 188	265 227	294 283	329 314	347	376	318 317	347	371	400	335	365	388	418	347	376	400	435
35	200 172	250 208	286 259	320 288	337 323	366	309 290	337	360	389	326	354	377	406	337	366	389	423
36	189 158	237 191	278 238	311 264	328 297	356 339	295 267	338 312	350	378	317 311	344	367	394	328	356	378	411
37	179 146	224 176	263 219	303 243	319 274	346 312	280 246	319 288	341 324	368	302 287	335	357	384	319	346	368	400
38	169 135	212 162	249 202	289 225	311 253	337 288	265 227	311 266	332 299	358 341	287 265	326 310	347	374	308 305	337	358	389
39	161 124	202 150	237 187	275 208	303 234	328 266	252 210	299 246	323 276	349 316	272 245	318 287	338 322	364	292 282	328	349	379
40	153 115	192 139	225 174	261 193	292 217	320 247	239 194	284 228	315 256	340 292	259 227	307 266	330 299	355 342	278 262	320 306	340	370
41	146 107	182 129	214 161	249 179	278 201	312 229	228 181	270 211	303 238	332 272	246 211	292 247	322 278	346 318	265 243	312 285	332 320	361
42	139 100	174 120	204 150	237 166	265 187	305 213	217 168	258 197	324 253	352 285	235 196	279 229	311 258	338 295	252 226	300 265	324 298	352 341
43	132 93	166 112	195 140	226 155	253 174	293 199	207 156	246 183	275 206	316 235	266 183	297 214	330 241	352 275	240 211	286 247	316 278	344 318
44	126 87	158 105	186 130	216 145	241 163	280 186	198 146	235 171	263 193	305 220	214 171	254 200	284 225	323 257	230 196	273 230	305 259	336 297
45	121 81	151 98	178 122	206 135	231 152	268 173	189 137	225 160	251 180	291 205	204 159	243 187	271 210	315 240	220 184	261 215	291 242	329 278
46	116 76	145 92	170 114	198 127	221 142	256 162	181 128	215 150	240 168	279 192	196 149	232 175	260 197	302 225	210 172	250 202	279 227	322 260
47	111 71	139 86	163 107	189 119	212 133	245 152	173 120	206 140	230 158	267 180	187 140	222 164	249 184	289 211	201 161	239 189	267 213	311 244
48	106 67	133 81	156 100	181 111	203 125	235 143	166 112	197 132	221 148	256 169	180 131	213 154	238 173	277 198	193 151	229 177	256 200	298 229
49							159 106	189 124	212 139	246 159	172 124	205 144	229 163	266 186	185 142	220 167	246 188	286 215
50							153 100	182 117	203 131	236 150	166 116	197 136	220 153	255 175	178 134	211 157	236 177	274 202
51							147 94	175 110	196 124	227 141	159 110	189 128	211 144	245 165	171 126	203 148	227 166	264 191
52							142 88	168 104	188 117	218 133	153 103	182 121	203 136	236 156	164 119	196 139	218 157	254 180
53											147 98	175 114	196 128	227 147	158 112	188 132	210 148	244 170
54											142 92	168 108	188 121	219 139	152 106	181 125	202 140	235 161
55											137 87	162 102	182 115	211 132	147 101	175 118	195 133	227 152
56											132 83	157 97	175 109	203 125	142 95	169 112	188 126	219 144
57															137 90	163 106	182 119	211 137
58															132 86	157 101	175 113	204 130
59															128 81	152 95	169 108	197 123
60															124 77	147 91	164 102	191 117

Loads Above Heavy Lines Are Governed By Shear.

Tests on steel joists designed in accordance with the Standard Specifications have demonstrated that the Standard Load Tables are applicable for concentrated top chord loadings (such as are developed in bulb-tee roof construction) when the sum of the equal concentrated top chord loadings does not exceed the allowable uniform loading for the joist type and span and the loads are placed at spacings not exceeding 33" along the top chord.

*Indicates Nominal Depth of Steel Joists only.

†The weights per foot as shown in these tables are approximate only. Such weights are shown only for the convenience of the designer. They cannot be used in figuring prices or determining shipping weights.

**H-Series
LH-Series
DLH-Series**

**J-Series
LJ-Series
DLJ-Series**

Armco Joists in Six Series

Made in Kansas City, Missouri

Lengths from 8 to 144 feet

Depths from 8 to 72 inches

The availability of Shortspan and Longspan Steel Joists in such wide ranges of lengths and depths expands freedom of design and helps reduce costs in a broad range of structures. Joist series listed in this catalog can be used in floor or roof construction.

Shortspan Steel Joists are made in standard depths ranging between 8" and 32", in spans up to 64'. Longspan and Deep Longspan Steel Joists range from 18" to 72" in depth—and spans up to 144'. Longspan and Deep Longspan Joists are ideally suited for the design and construction of auditoriums, large garages, gymnasiums, bowling centers, supermarkets, warehouses and other structures requiring extra-long clear spans.

Shortspan Joists

All J-Series and H-Series Joists are designed in accordance with the Steel Joist Institute Specifications and Load Tables, and all designs are reviewed by the Steel Joist Institute. Top and bottom chords are cold formed steel sections.

J-SERIES: Based on design stress in tension of 22,000 psi maximum and made from 36,000 psi minimum yield strength steel. Spans up to 60'.

H-SERIES: Based on chord design stress in tension of 30,000 psi maximum and made from 50,000 psi minimum yield strength steel in the chords and 36,000 psi minimum yield strength steel in the webs. Spans up to 60'.

The 32DH9, 32DH10 and 32DH11 joists are not part of the Steel Joist Institute Standard Load Table, however, Armco has added these three joists, in lengths up to 64', to the H-Series load table. These joists are designed in accordance with the Steel Joist Institute Specification for H-Series Joists. The chord designs are based on a 30,000 psi maximum tension stress and made from 50,000 psi minimum yield strength steel. The webs are made from 36,000 psi minimum yield strength steel.

Longspan Joists

All Longspan Joists are designed in accordance with the Steel Joist Institute Standard Specifications and Load Tables.

LJ-SERIES: Based on design stress in tension of 22,000 psi maximum and made from 36,000 psi minimum yield strength steel. Spans up to 96'.

LH-SERIES: Based on chord and web angle design stresses in tension of 30,000 psi maximum and made from 50,000 psi minimum yield strength steel. Web bars are made of 36,000 psi minimum yield strength steel. Spans up to 96'.

Deep Longspan Joists

All Deep Longspan Joists are designed in accordance with the Steel Joist Institute Standard Specifications and Load Tables. Top and bottom chords are composed of pairs of hot rolled angles.

DLJ-SERIES: Based on design stress in tension of 22,000 psi maximum and made from 36,000 psi minimum yield strength steel. Spans up to 144'.

DLH-SERIES: Based on design stress in tension of 30,000 psi maximum and made using 50,000 psi minimum yield strength steel in the chords. Spans up to 144'.



Armco is a member of the Steel Joist Institute

Riopelle Engineering Sales, Inc.

8817 W. Lynn Ave.

Milwaukee, Wisc. 53225

Armco Steel Corporation

Dept. LK-374

7000 Roberts Street

Kansas City, Missouri 64125

Phone: (816) 483-5100

414-353-1080

SALES OFFICES IN THE FOLLOWING CITIES:

Albuquerque, NM 87108..... 525 San Pedro, N.E.
Atlanta, GA 30329..... Box 49525
Baltimore, MD 21204..... Box 6793
Birmingham 35223..... 14 Office Park, Mountain Brook, AL
Boston 02181..... One Washington St., Wellesley Hills, MA
Buffalo, NY 14226..... 3980 Sheridan Dr.
Chicago, IL 60606..... 120 South Riverside Plaza
Cincinnati, OH 45227..... 5725 Dragon Way, Fairfax
Cleveland, OH 44115..... 730 B. F. Keith Bldg.
Columbus, OH 43229..... 6660 Doubletree Ave.
Dallas, TX 75219..... Box 19425
Davenport 52722..... 321 8th St., Bettendorf, IA
Dayton, OH 45439..... 3131 S. Dixie Drive
Denver 80110..... Box 1478, Englewood, CO
Des Moines, IA 50322..... 8450 Hickman Rd.
Detroit 48075..... 17360 W. Eight Mile Rd., Southfield, MI
Grand Rapids, MI 49505..... 2922 Fuller, N.E.
Greensboro, NC 27408..... 1834 Pembroke Road
Houston, TX 77027..... 1455 West Loop South
Indianapolis, IN 46220..... Box 20312
Jackson, MS 39206..... Box 9642
Joplin, MO 64802..... Box 1056
Kansas City, MO 64125..... 7000 Roberts St.
Los Angeles, CA 90045..... 5250 Century Blvd.
Louisville, KY 40222..... 9200 Shelbyville Rd., 1 Hurstbourne Park
Lubbock, TX 79401..... 414 Lubbock Nat'l. Bank Bldg.
Memphis, TN 38157..... 5050 Poplar Ave.
Milwaukee, WI 53202..... 111 East Wisconsin Ave.
Minneapolis, MN 55412..... 4345 Lyndale Ave., N.
Nashville, TN 37204..... 100 Oaks Office Tower
New Orleans 70002..... Box 7245, Metairie, LA
New York 07632..... 140 Sylvan Ave., Englewood Cliffs, NJ
Oklahoma City, OK 73116..... Suite 138, 4334 Northwest Expressway
Omaha, NB 68102..... 701 Capitol Plaza Bldg.
Philadelphia 19004..... 512 Barclay Bldg., Bala-Cynwyd, PA
Phoenix, AZ 85002..... Box 13026
Pittsburgh, PA 15222..... 3 Gateway Center
San Antonio, TX 78228..... 4414 Centerview Dr.
Seattle 98100..... Box 1584, Bellevue, WA
Shreveport, LA 71105..... 2920 Knight St., Suite 213
Sioux Falls, SD 57105..... 820 East 41st St.
Springfield, MO 65804..... Box 3494, Glenstone Station
St. Louis 63105..... 10 S. Brentwood Blvd., Clayton, MO
Tulsa, OK 74135..... 5350 East 46th Street
Wichita, KS 67207..... Suite 730, 7701 East Kellogg

ARMCO STEEL



EFFECTIVE JUNE 1974

