



STANDARD LOAD TABLE

OPEN WEB STEEL JOISTS, J-SERIES

Allowable Total Safe Loads in Pounds Per Linear Foot of J-SERIES Steel Joists — *For Joist Depths 8" to 14".

The following table gives the TOTAL safe uniformly-distributed load-carrying capacities, in pounds per linear foot, of J-Series Open Web Steel Joists adopted by the Steel Joist Institute. The weight of DEAD loads, including the joists, must in all cases be deducted to determine the LIVE load-carrying capacities of the joists.

Joist Designation	8J2	10J2	10J3	10J4	12J2	12J3	12J4	12J5	12J6	14J3	14J4	14J5	14J6	14J7
*Depth in Inches	8	10	10	10	12	12	12	12	12	14	14	14	14	14
Resisting Moment In Inch Pounds	6,000	70,000	89,000	111,000	85,000	108,000	135,000	161,000	196,000	127,000	159,000	190,000	230,000	276,000
Max. End Reaction In Pounds	1900	2000	2200	2400	2200	2300	2500	2700	3000	2400	2800	3100	3400	3700
†Approx. Joist Wgt. Pounds Per Foot	4.2	4.2	4.8	6.0	4.5	5.1	6.0	7.0	8.1	5.2	6.4	7.3	8.4	9.7
Span in Feet	8	10	10	10	12	12	12	12	12	14	14	14	14	14
9	475													
10	422													
11	309	400	440	480										
12	259	364	400	436										
13	221	324	367	400	367	383	417	450	500					
14	190	276	338	369	335	354	385	415	462					
15	166	238	303	343	289	329	357	386	429	343	400	443	486	529
16	146	207	264	320	252	307	333	360	400	320	373	413	453	493
17		182	232	289	221	281	313	338	375	300	350	388	425	463
18		161	205	256	196	249	294	318	353	282	329	365	400	435
19		144	183	228	175	222	278	300	333	261	311	344	378	411
20		129	164	205	157	199	249	284	316	235	294	326	358	389
21		117	148	185	142	180	225	268	300	212	265	310	340	370
22					128	163	204	243	286	192	240	287	324	352
23					117	149	186	222	270	175	219	262	309	336
24					107	136	170	203	247	160	200	239	290	322
25					98	125	156	186	227	147	184	220	266	308
26										135	170	203	245	294
27										125	157	187	227	272
28										116	145	174	210	252
										108	135	162	196	235

*Indicates Nominal Depth of Steel Joists only.

†Approximate Weights per Linear Foot of Steel Joists only. Accessories and hailer strip not included.

‡See Manufacturers' Catalog for detailed information on specific joist types.

LOADS ABOVE COLORED LINES ARE GOVERNED BY SHEAR.

Tests on steel joists designed in accordance with the Steel Joist Institute Standard Specifications have demonstrated that the Steel Joist Institute 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.

Adopted by the Steel Joist Institute May 30, 1961.

This Table in accordance with Simplified Practice Recommendation filed with the Commodity Standards Division, Office of Technical Services, U. S. Department of Commerce.

OPEN WEB STEEL JOISTS, J-SERIES

Allowable Total Safe Loads in Pounds Per Linear Foot of J-SERIES Steel Joists — *For Joist Depths 16" to 24"

The following table gives the TOTAL safe uniformly-distributed load-carrying capacities, in pounds per linear foot, of J-Series Open Web Steel Joists adopted by the Steel Joist Institute. The weight of DEAD loads, including the joists, must in all cases be deducted to determine the LIVE load-carrying capacities of the joists.

Joist Designation	16J4	16J5	16J6	16J7	16J8	18J5	18J6	18J7	18J8	20J5	20J6	20J7	20J8	22J6	22J7	22J8	24J6	24J7	24J8
*Depth in Inches	16	16	16	16	16	18	18	18	18	20	20	20	20	22	22	22	24	24	24
Resisting Moment In Inch Pounds	173,000	216,000	258,000	310,000	359,000	243,000	293,000	352,000	406,000	265,000	316,000	382,000	455,000	335,000	420,000	493,000	367,000	460,000	540,000
Max. End Reaction In Pounds	3000	3300	3600	4000	4300	3500	3900	4200	4500	3800	4100	4300	4600	4200	4500	4800	4400	4700	5000
†Approx. Joist Wgt Pounds Per Foot	6.6	7.6	8.5	10.1	11.3	7.9	9.0	10.2	11.3	8.1	9.2	10.6	11.9	9.6	10.5	11.9	9.9	11.1	12.4
Span In Feet																			
16	375	413	450	500	538														
17	353	388	424	471	506														
18	333	367	400	444	478														
19	316	347	379	421	453														
20	288	330	360	400	430														
21	262	314	343	381	410														
22	238	298	327	364	391														
23	218	272	313	348	374														
24	200	250	299	333	358														
25	185	230	275	320	344														
26	171	213	254	306	331														
27	158	198	236	283	319														
28	147	184	219	264	305														
29	137	171	205	246	285														
30	128	160	191	230	266														
31	120	150	179	215	249														
32	113	141	168	202	234														
33																			
34																			
35																			
36																			
37																			
38																			
39																			
40																			
41																			
42																			
43																			
44																			
45																			
46																			
47																			
48																			

*Indicates Nominal Depth of Steel Joists only.
†Approximate Weights per Linear Foot of Steel Joists only. Accessories and nailer strip not included.
‡See Manufacturers' Catalog for detailed information on specific joist types.

LOADS ABOVE COLORED LINES ARE GOVERNED BY SHEAR.
Tests on steel joists designed in accordance with the Steel Joist Institute Standard Specifications have demonstrated that the Steel Joist Institute 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.
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