



# "J" SERIES

Laclede J-Series Steel Joists may be arranged to provide a wide range of loading conditions. This design feature may be readily achieved through selection of the appropriate size and spacing of joists. Design stresses based upon steel of 36,000 PSI minimum yield strength are used in Laclede J-Series Steel Joists.

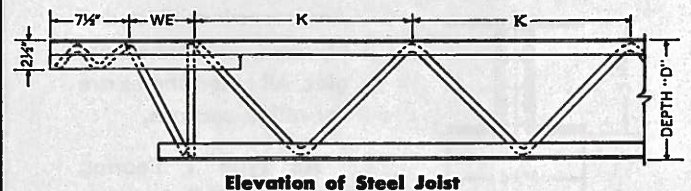
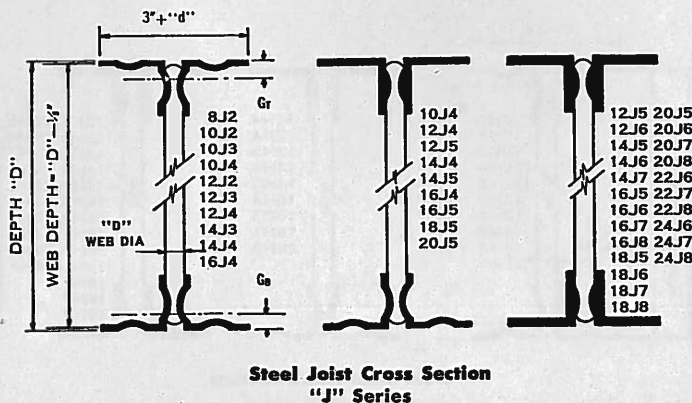
Laclede J-Series Joists are primarily developed to provide economical, rigid, fire resistant and durable floors and roofs. They are completely standardized as to lengths, depths and carrying capacities. Floors and roofs are thereby more quickly, easily and accurately designed.

## TABLE OF STEEL JOIST DIMENSIONS "J" SERIES

Steel Joist Type No.	Joist Dimensions		Web		Top Chord—2 Angles			Bottom Chord—2 Angles			Approx. Weight Pounds Per Foot*	Maximum Span Developing Full Shear
	Depth "D"	Panel Max. "K"	Di- ameter "d"	Area Sq. In.	Size Inches	Area Sq. In.	"Gr" In.	Size Inches	Area Sq. In.	"Ga" In.		
8J2	8"	15"	27/64"	.140	1 1/2 x 1 1/4 x .085	.446	.331	1 1/2 x 1 1/4 x .085	.446	.331	3.90	9' 10"
10J2	10"	16"	7/16"	.150	1 1/2 x 1 1/4 x .085	.446	.331	1 1/2 x 1 1/4 x .085	.446	.331	3.99	11' 8"
10J3	10"	16"	29/64"	.161	1 1/2 x 1 1/4 x .106	.557	.338	1 1/2 x 1 1/4 x .085	.446	.331	4.46	13' 6"
10J4	10"	16"	31/64"	.184	1 1/2 x 1 1/4 x .120	.707	.354	1 1/2 x 1 1/4 x .106	.557	.338	5.50	15' 5"
12J2	12"	18"	15/32"	.173	1 1/2 x 1 1/4 x .085	.446	.331	1 1/2 x 1 1/4 x .085	.446	.331	4.15	12' 11"
12J3	12"	18"	31/64"	.184	1 1/2 x 1 1/4 x .106	.557	.338	1 1/2 x 1 1/4 x .085	.446	.331	4.62	15' 8"
12J4	12"	18"	33/64"	.209	1 1/2 x 1 1/4 x .120	.707	.354	1 1/2 x 1 1/4 x .106	.557	.338	5.63	18' 0"
12J5	12"	18"	17/32"	.222	1 1/2 x 1 1/4 x .150	.856	.360	1 1/2 x 1 1/4 x .120	.707	.354	6.78	19' 11"
12J6	12"	18"	35/64"	.235	1 1/2 x 1 1/4 x .185	1.025	.368	1 1/2 x 1 1/4 x .136	.787	.357	7.75	21' 9"
14J3	14"	22"	17/32"	.222	1 1/2 x 1 1/4 x .106	.557	.338	1 1/2 x 1 1/4 x .085	.446	.331	4.78	17' 8"
14J4	14"	22"	9/16"	.249	1 1/2 x 1 1/4 x .120	.707	.354	1 1/2 x 1 1/4 x .106	.557	.338	5.85	18' 11"
14J5	14"	22"	37/64"	.262	1 1/2 x 1 1/4 x .150	.856	.360	1 1/2 x 1 1/4 x .120	.707	.354	6.96	20' 5"
14J6	14"	22"	39/64"	.292	1 1/2 x 1 1/4 x .185	1.025	.368	1 1/2 x 1 1/4 x .136	.787	.357	8.02	22' 7"
14J7	14"	22"	9/8"	.307	1 1/2 x 1 1/4 x .230	1.235	.381	1 1/2 x 1 1/4 x .170	.953	.365	9.40	24' 10"
16J4	16"	24"	19/32"	.277	1 1/2 x 1 1/4 x .120	.707	.354	1 1/2 x 1 1/4 x .106	.557	.338	6.05	19' 3"
16J5	16"	24"	5/8"	.307	1 1/2 x 1 1/4 x .150	.856	.360	1 1/2 x 1 1/4 x .120	.707	.354	7.27	21' 10"
16J6	16"	24"	41/64"	.322	1 1/2 x 1 1/4 x .185	1.025	.368	1 1/2 x 1 1/4 x .136	.787	.357	8.25	23' 11"
16J7	16"	24"	43/64"	.355	1 1/2 x 1 1/4 x .230	1.235	.381	1 1/2 x 1 1/4 x .170	.953	.365	9.74	25' 10"
16J8	16"	24"	11/16"	.371	1 1/2 x 1 1/4 x .275	1.437	.394	1 1/2 x 1 1/4 x .195	1.072	.371	10.95	27' 10"
18J5	18"	24"	21/32"	.338	1 1/2 x 1 1/4 x .150	.856	.360	1 1/2 x 1 1/4 x .120	.707	.354	7.60	23' 2"
18J6	18"	24"	43/64"	.355	1 1/2 x 1 1/4 x .185	1.025	.368	1 1/2 x 1 1/4 x .136	.787	.357	8.59	25' 1"
18J7	18"	24"	11/16"	.371	1 1/2 x 1 1/4 x .230	1.235	.381	1 1/2 x 1 1/4 x .170	.953	.365	9.98	27' 11"
18J8	18"	24"	45/64"	.388	1 1/2 x 1 1/4 x .275	1.437	.394	1 1/2 x 1 1/4 x .195	1.072	.371	11.20	30' 1"
20J5	20"	24"	11/16"	.371	1 1/2 x 1 1/4 x .150	.856	.360	1 1/2 x 1 1/4 x .120	.707	.354	7.97	23' 3"
20J6	20"	24"	45/64"	.388	1 1/2 x 1 1/4 x .185	1.025	.368	1 1/2 x 1 1/4 x .136	.787	.357	8.96	25' 8"
20J7	20"	24"	23/32"	.406	1 1/2 x 1 1/4 x .220	1.189	.378	1 1/2 x 1 1/4 x .170	.953	.365	10.22	29' 7"
20J8	20"	24"	47/64"	.424	1 1/2 x 1 1/4 x .275	1.437	.394	1 1/2 x 1 1/4 x .195	1.072	.371	11.62	33' 0"
22J6	22"	24"	47/64"	.424	1 1/2 x 1 1/4 x .170	.953	.365	1 1/2 x 1 1/4 x .136	.787	.357	9.15	26' 7"
22J7	22"	24"	3/4"	.442	1 1/2 x 1 1/4 x .220	1.189	.378	1 1/2 x 1 1/4 x .170	.953	.365	10.66	31' 1"
22J8	22"	24"	49/64"	.460	1 1/2 x 1 1/4 x .275	1.437	.394	1 1/2 x 1 1/4 x .195	1.072	.371	12.07	34' 3"
24J6	24"	24"	49/64"	.460	1 1/2 x 1 1/4 x .170	.953	.365	1 1/2 x 1 1/4 x .136	.787	.357	9.64	27' 10"
24J7	24"	24"	25/32"	.479	1 1/2 x 1 1/4 x .220	1.189	.378	1 1/2 x 1 1/4 x .170	.953	.365	11.17	32' 7"
24J8	24"	24"	51/64"	.499	1 1/2 x 1 1/4 x .275	1.437	.394	1 1/2 x 1 1/4 x .195	1.072	.371	12.60	36' 0"

\*Based on Laclede sections — See Bureau of Standards simplified practice recommendation for estimated S.J.I. weights.

\*\*Depth "D" — Allowable tolerance  $\pm \frac{1}{4}$  inch.



Laclede Steel Joist designs for standard "J" and "H" Series meet or exceed the standard design properties for Open Web Steel Joists submitted for Simplified Practice Recommendation of the Bureau of Standards of the U. S. Department of Commerce and adopted by the Steel Joist Institute May 30, 1961, and May 31, 1961.