

STRUCTURAL AND
SHIPBUILDING SHAPES

AISC E&R Library



5547



THE PHOENIX IRON CO.
PHILADELPHIA, PA.

B291

H. Frankland.

Sections of Shapes

Manufactured by

**The
Phoenix Iron Co.**

Philadelphia, Pa.

1923

**WORKS
Phoenixville, Pa.**

GENERAL NOTES

The manner of increasing the weights of various sections is illustrated by figures on page 26.

Increasing the weights of I-beams and channels adds an equal amount to web thickness and flange width.

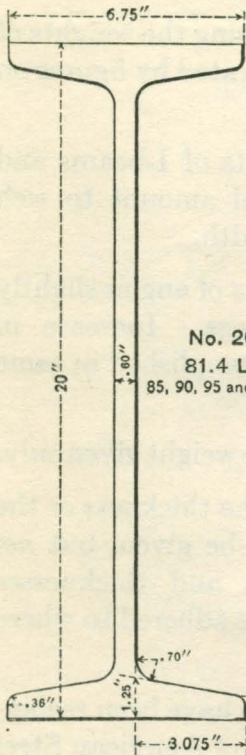
Increasing the weights of angles slightly increases lengths of legs. Increase in weights of Z-bars is accomplished in same manner.

T-bars can be rolled to weight given only.

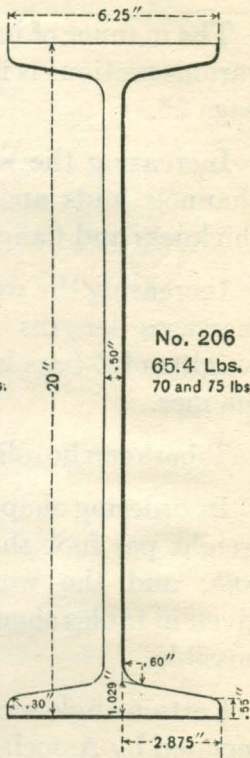
In ordering shapes, the thickness *or* the weight per foot should be given, but *not both*, and the weights and thicknesses given in tables should be adhered to where possible.

Certain angle sections have been recommended by Association of American Steel Manufacturers as standard for structural purposes, and by using these, quick shipments are assured. Angles other than standard are marked "special" in tables of elements.

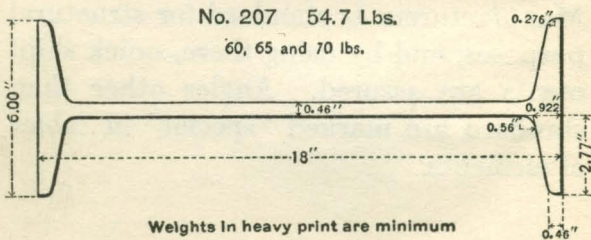
I-BEAMS



No. 208
81.4 Lbs.
85, 90, 95 and 100 lbs.



No. 206
65.4 Lbs.
70 and 75 lbs.

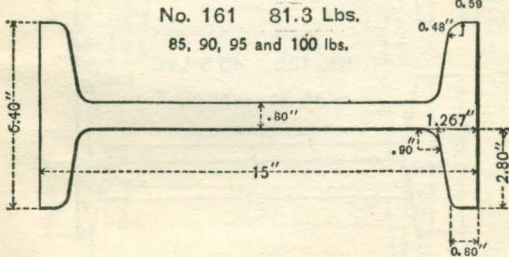
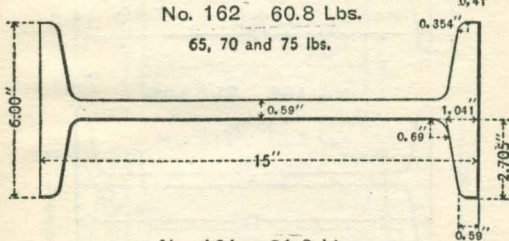
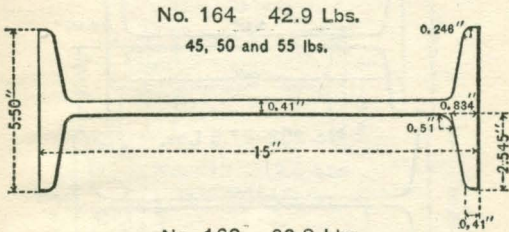
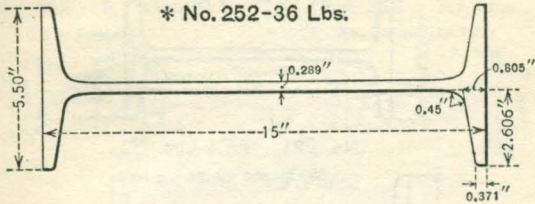


No. 207 54.7 Lbs.
60, 65 and 70 lbs.

Weights in heavy print are minimum

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I-BEAMS



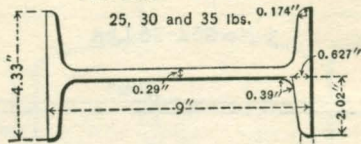
Weights in heavy print are minimum
*Special

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I-BEAMS

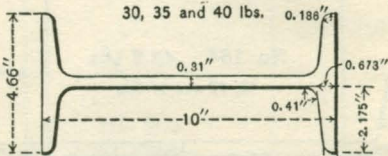
No. 209 21.8 Lbs.

25, 30 and 35 lbs.

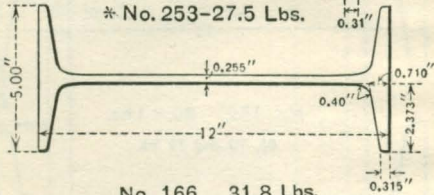


No. 221 25.4 Lbs.

30, 35 and 40 lbs.

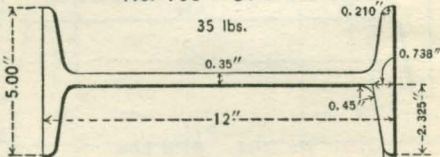


* No. 253-27.5 Lbs.



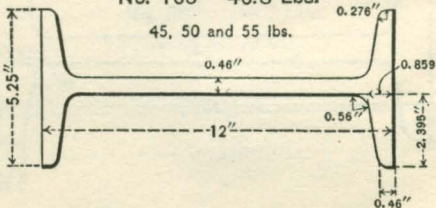
No. 166 31.8 Lbs.

35 lbs.



No. 165 40.8 Lbs.

45, 50 and 55 lbs.



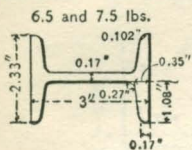
Weights in heavy print are minimum

*Special

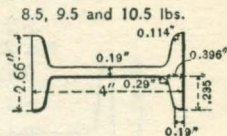
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I-BEAMS

No. 222 5.7 Lbs.

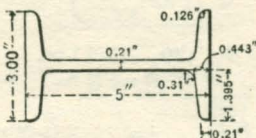


No. 213 7.7 Lbs.



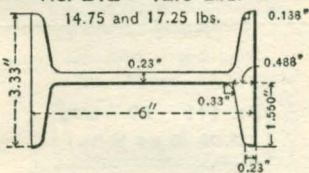
No. 214 10.0 Lbs.

12.25 and 14.75 lbs.



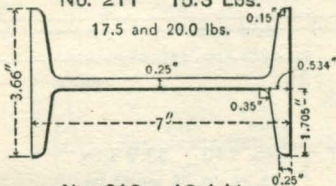
No. 212 12.5 Lbs.

14.75 and 17.25 lbs.



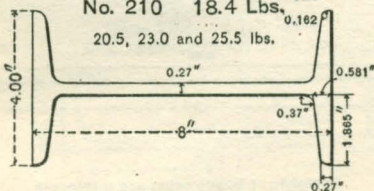
No. 211 15.3 Lbs.

17.5 and 20.0 lbs.



No. 210 18.4 Lbs.

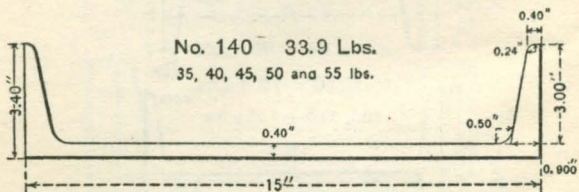
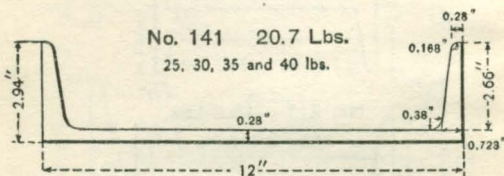
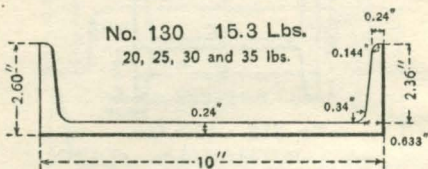
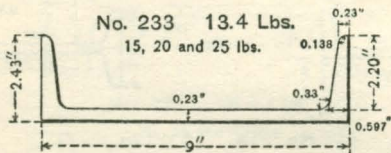
20.5, 23.0 and 25.5 lbs.



Weights in heavy print are minimum

THE PHOENIX IRON COMPANY

CHANNELS

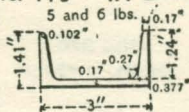


Weights in heavy print are minimum

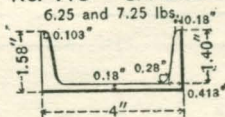
THE PHOENIX IRON COMPANY

CHANNELS

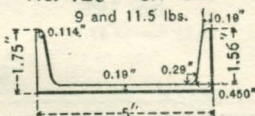
No. 116 4.1 Lbs.



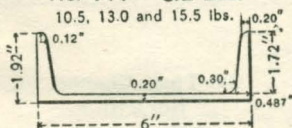
No. 118 5.4 Lbs.



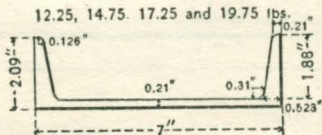
No. 120 6.7 Lbs.



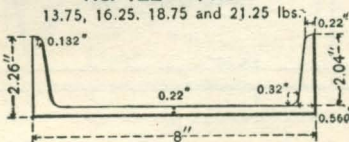
No. 144 8.2 Lbs.



No. 136 9.8 Lbs.



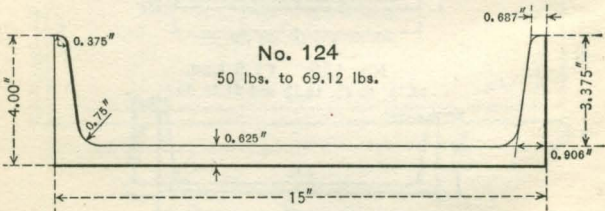
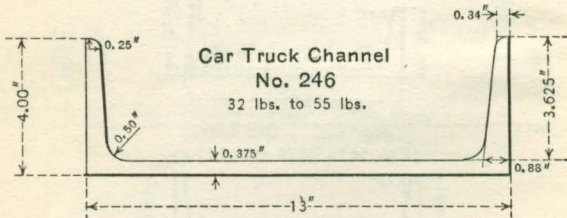
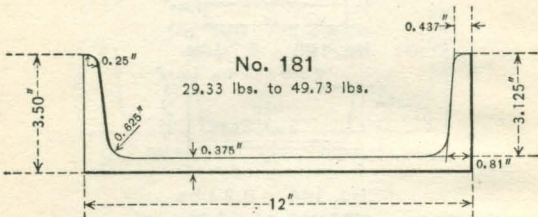
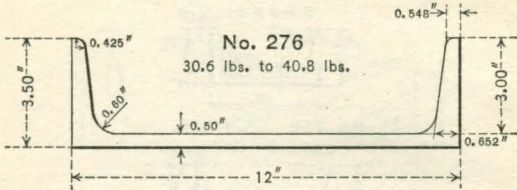
No. 122 11.5 Lbs.



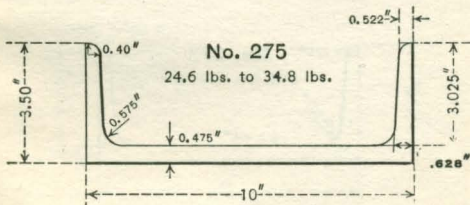
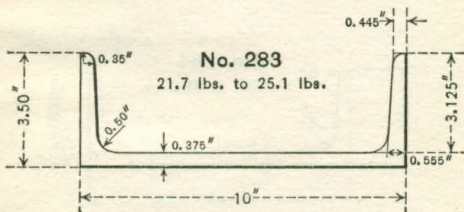
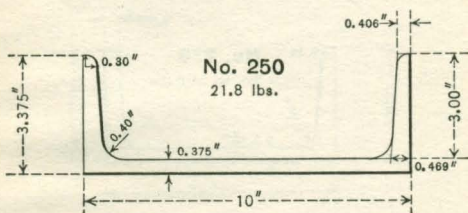
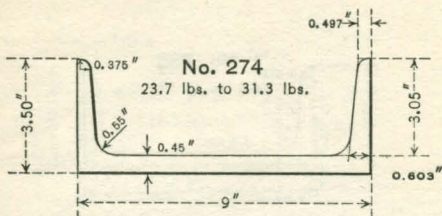
Weights in heavy print are minimum

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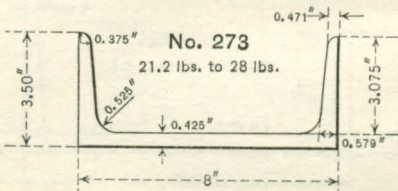
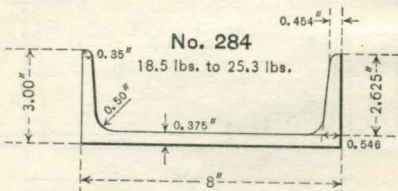
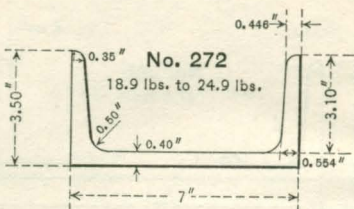
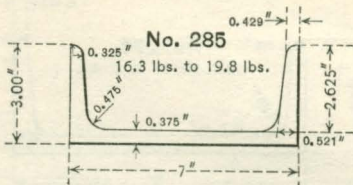
CHANNELS
SPECIAL SECTIONS



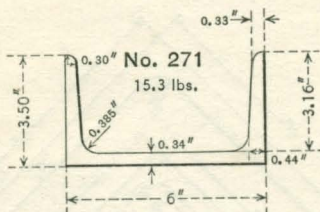
**CHANNELS
SPECIAL SECTIONS**



CHANNELS
SPECIAL SECTIONS

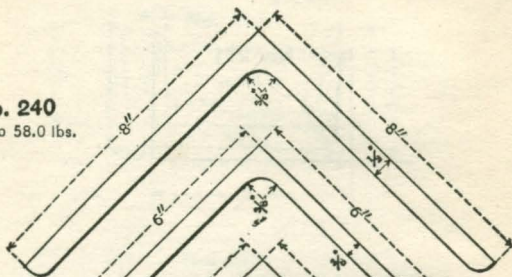


CHANNELS
SPECIAL SECTIONS

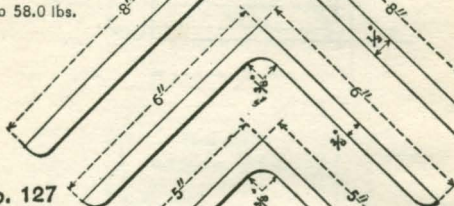


ANGLES WITH EQUAL LEGS

No. 240
26.4 to 58.0 lbs.



No. 127
14.9 to 37.4 lbs.



No. 126
12.3 to 25.4 lbs.



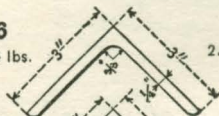
No. 14
6.6 to 20.7 lbs.



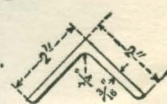
No. 15
5.8 to 16.0 lbs.



No. 16
4.9 to 14.4 lbs.



No. 18
2.44 to 5.3 lbs.



No. 17
3.5 to 8.6 lbs.



No. 19
2.1 to 4.2 lbs.



No. 38
2.75 to 7.2 lbs.



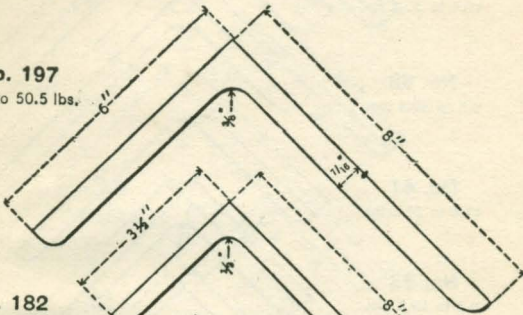
No. 20
1.8 to 3.6 lbs.



ANGLES WITH UNEQUAL LEGS

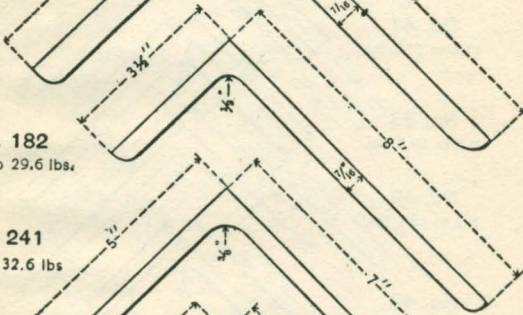
No. 197

20.2 to 50.5 lbs.



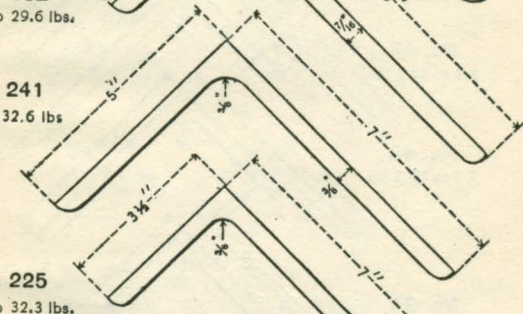
No. 182

16.5 to 29.6 lbs.



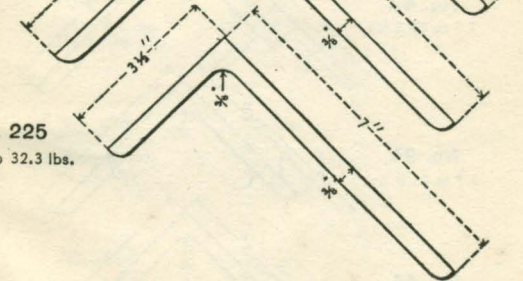
No. 241

14.7 to 32.6 lbs.



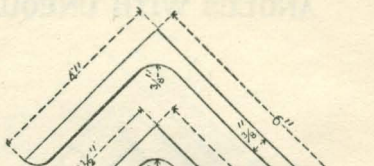
No. 225

13.0 to 32.3 lbs.



ANGLES WITH UNEQUAL LEGS

No. 91
10.4 to 30.6 lbs.



No. 92
9.8 to 28.9 lbs.



No. 41
11.0 to 22.0 lbs.



No. 93
8.7 to 19.8 lbs.



No. 42
8.2 to 18.5 lbs.



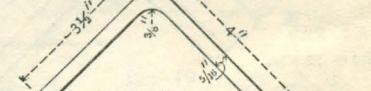
No. 43
7.7 to 18.5 lbs.



No. 94
7.7 to 15.0 lbs.



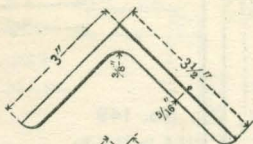
No. 44
5.8 to 16.5 lbs.



ANGLES WITH UNEQUAL LEGS

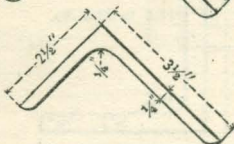
No. 95

5.4 to 12.5 lbs.



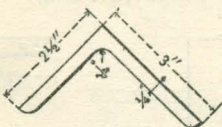
No. 90

4.9 to 12.2 lbs.



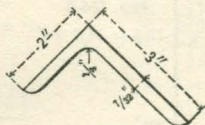
No. 86

4.5 to 11.0 lbs.



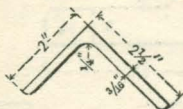
No. 109

3.1 to 8.1 lbs.



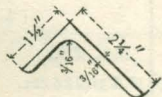
No. 184

2.75 to 7.6 lbs.



No. 96

2.28 to 4.4 lbs.

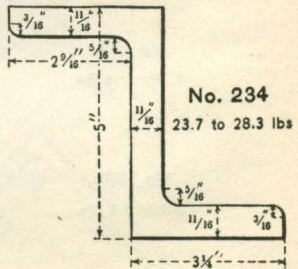
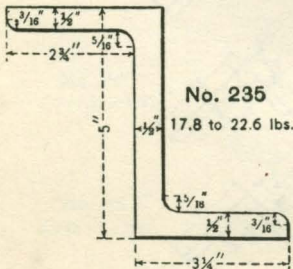
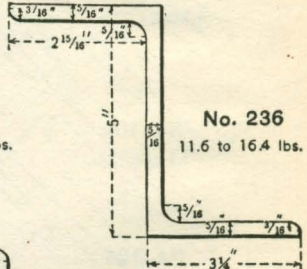
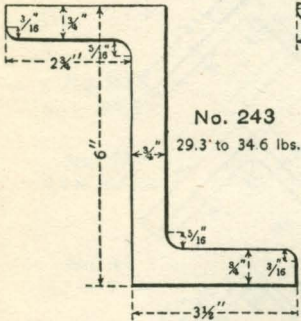
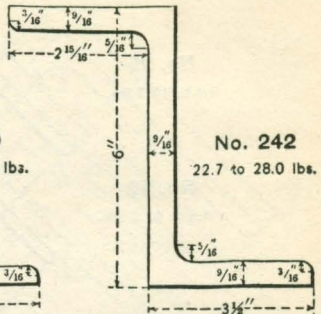
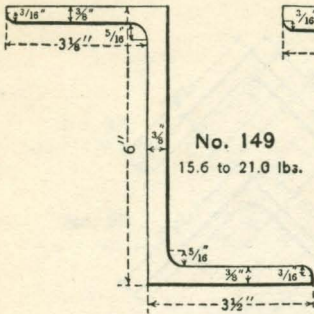


No. 185

2.0 to 3.7 lbs.

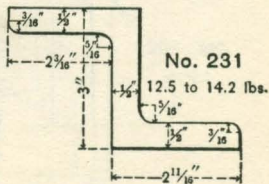
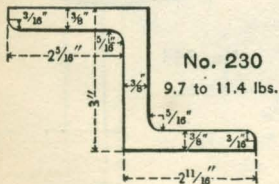
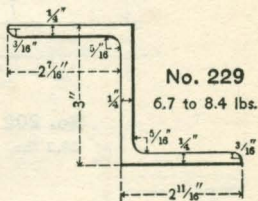
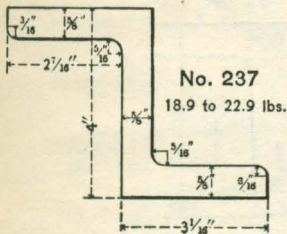
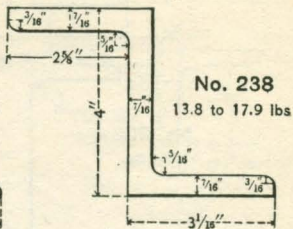
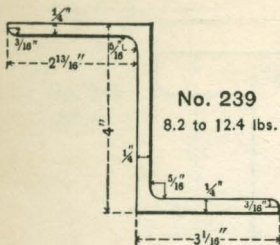


STANDARD Z-BARS

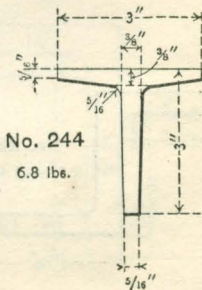
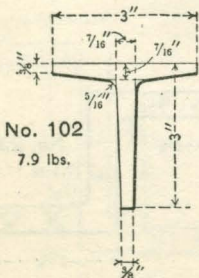
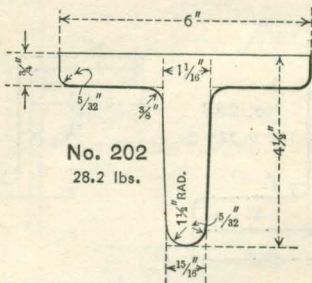
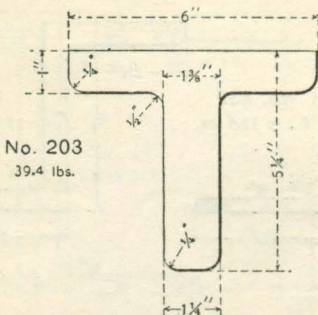


THE PHOENIX IRON COMPANY

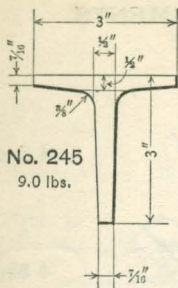
STANDARD Z-BARS



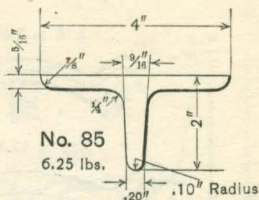
TEE BARS



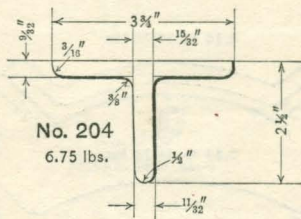
TEE BARS



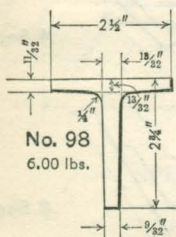
No. 245
9.0 lbs.



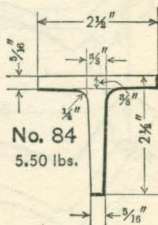
No. 85
6.25 lbs.



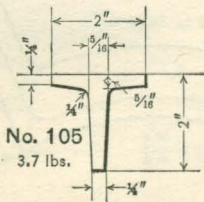
No. 204
6.75 lbs.



No. 98
6.00 lbs.

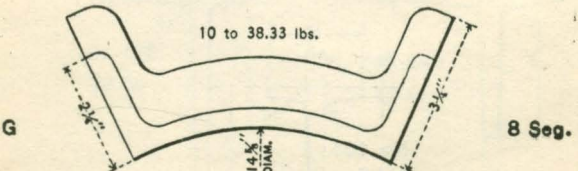
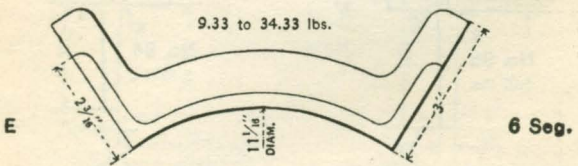
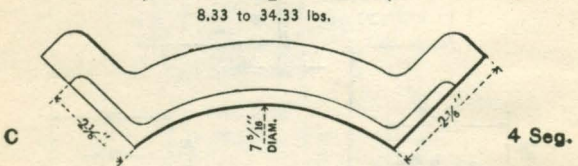
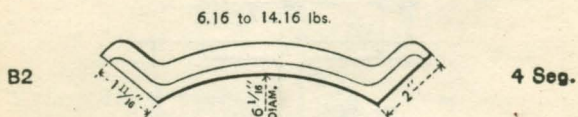
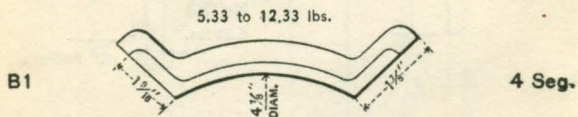
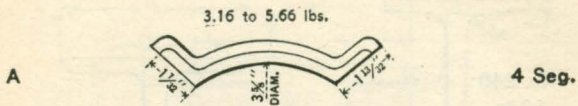


No. 84
5.50 lbs.



No. 105
3.7 lbs.

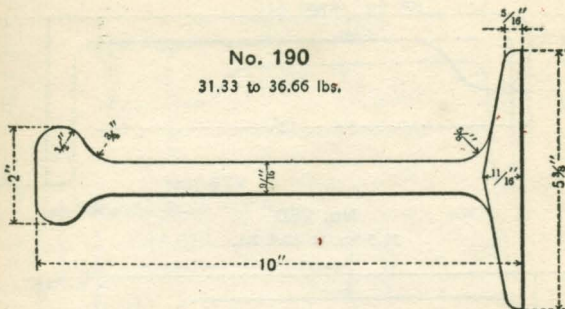
PHOENIX COLUMN SEGMENTS



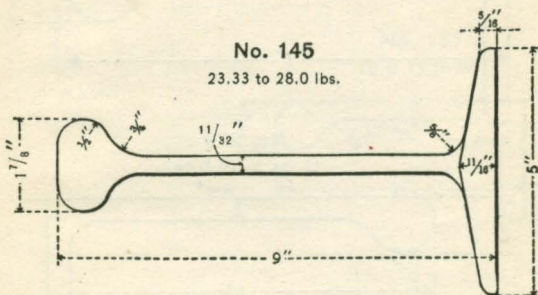
THE PHOENIX IRON COMPANY

DECK BEAMS
MINIMUM SIZE

No. 190
31.33 to 36.66 lbs.

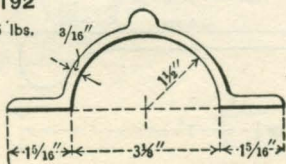


No. 145
23.33 to 28.0 lbs.



SPECIAL SECTION

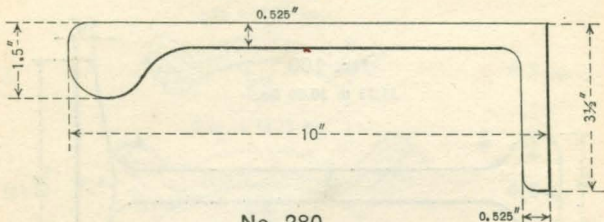
No. 192
5 to 6 lbs.



BULB ANGLES

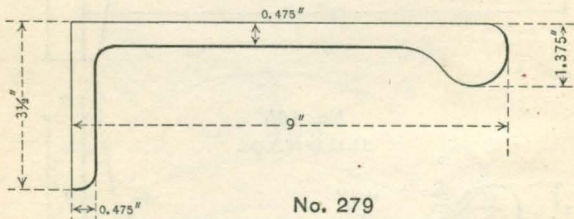
No. 281

24.9 lbs. to 35.2 lbs.



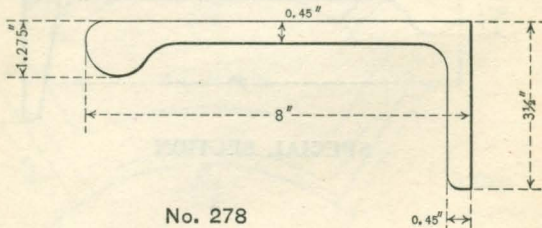
No. 280

20.9 lbs. to 30.4 lbs.



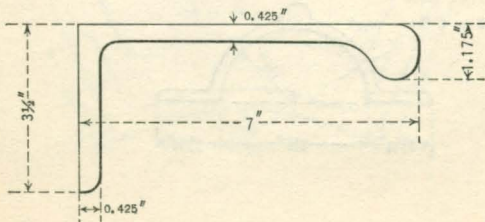
No. 279

18 lbs. to 26.7 lbs.



No. 278

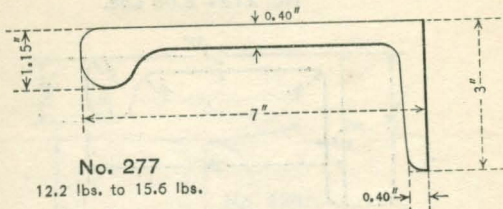
15.3 lbs. to 20 lbs.



BULB ANGLES

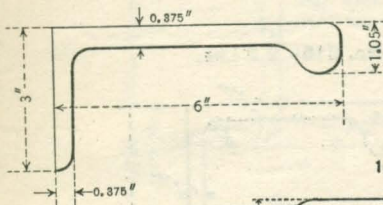
No. 282

13.9 lbs. to 18.4 lbs.



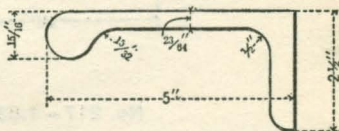
No. 277

12.2 lbs. to 15.6 lbs.



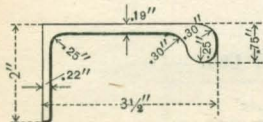
No. 157

10 to 13.33 lbs.



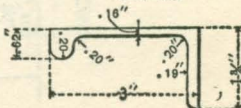
No. 220

4.65 lbs.



No. 219

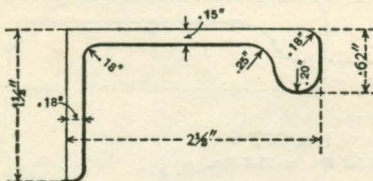
3.25 lbs.



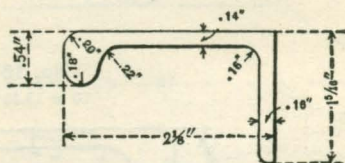
THE PHOENIX IRON COMPANY

BULB ANGLES

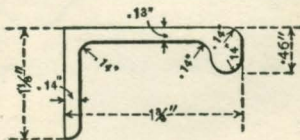
No. 215 - 2.66 Lbs.



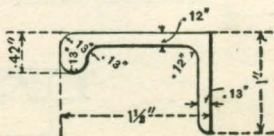
No. 216 - 2.2 Lbs.



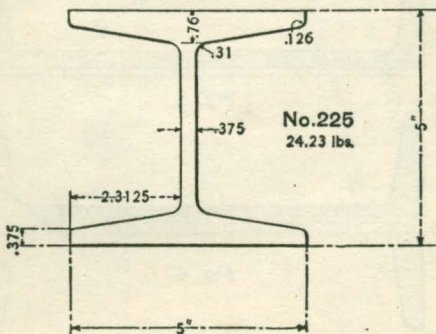
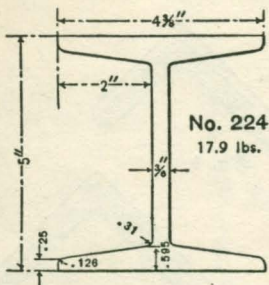
No. 217 - 1.63 Lbs.



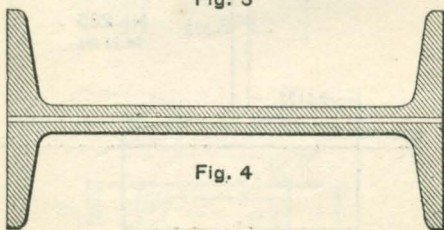
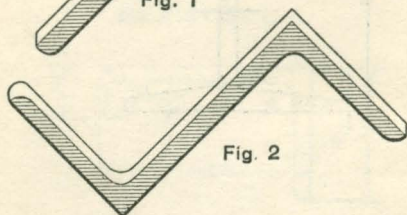
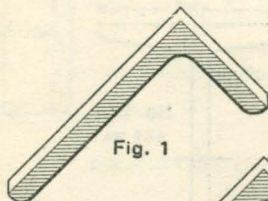
No. 218 - 1.27 Lbs.



STANCHIONS



METHOD OF
INCREASING SECTIONAL AREAS



THE PHOENIX IRON COMPANY

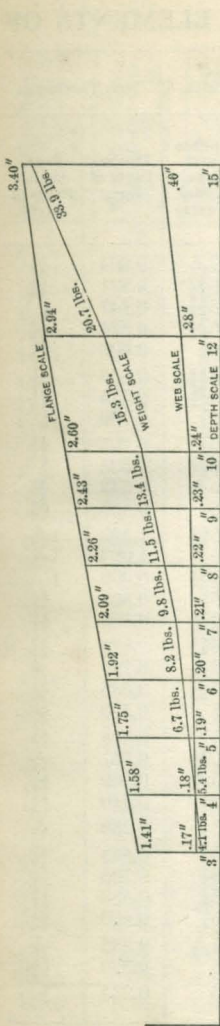


DIAGRAM FOR MINIMUM STANDARD CHANNELS

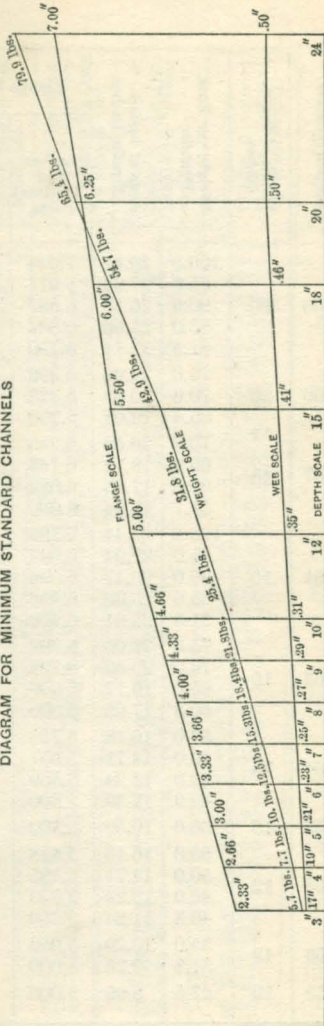


DIAGRAM FOR MINIMUM STANDARD I-BEAMS

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Beam. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Flange Width.		Web Thickness.	
				Inches and Decimal Parts.	Inches and Frac- tional Parts.	Decimal Parts of Inch.	Frac- tional Parts of Inch.
208	20	100.0	29.41	7.044	$7\frac{3}{64}$	0.894	$\frac{57}{64}$
		95.0	27.94	6.971	$6\frac{13}{32}$	0.821	$\frac{53}{64}$
		90.0	26.47	6.897	$6\frac{11}{32}$	0.747	$\frac{3}{4}$
		85.0	25.00	6.824	$6\frac{5}{16}$	0.674	$\frac{43}{64}$
		81.4	23.74	6.750	$6\frac{1}{4}$	0.600	$\frac{19}{32}$
206	20	75.0	22.06	6.399	$6\frac{13}{32}$	0.649	$\frac{21}{32}$
		70.0	20.59	6.325	$6\frac{21}{64}$	0.575	$\frac{37}{64}$
		65.4	19.08	6.250	$6\frac{1}{4}$	0.500	$\frac{1}{2}$
		70.0	20.59	6.245	$6\frac{1}{4}$	0.705	$\frac{23}{32}$
207	18	65.0	19.12	6.163	$6\frac{11}{64}$	0.623	$\frac{5}{8}$
		60.0	17.65	6.082	$6\frac{3}{32}$	0.542	$\frac{35}{64}$
		54.7	15.94	6.000	6	0.460	$\frac{29}{64}$
		100.0	29.41	6.792	$6\frac{51}{64}$	1.192	$1\frac{3}{16}$
161	15	95.0	27.94	6.694	$6\frac{45}{64}$	1.094	$1\frac{3}{32}$
		90.0	26.47	6.596	$6\frac{19}{32}$	0.996	1
		85.0	25.00	6.498	$6\frac{1}{2}$	0.898	$\frac{57}{64}$
		81.3	23.91	6.400	$6\frac{1}{32}$	0.800	$\frac{51}{64}$
		75.0	22.06	6.292	$6\frac{19}{64}$	0.882	$\frac{57}{64}$
162	15	70.0	20.59	6.194	$6\frac{3}{16}$	0.784	$\frac{25}{32}$
		65.0	19.12	6.096	$6\frac{3}{32}$	0.686	$\frac{11}{16}$
		60.8	17.68	6.000	6	0.590	$\frac{19}{32}$
		55.0	16.18	5.755	$5\frac{3}{4}$	0.665	$\frac{21}{32}$
164	15	50.0	14.71	5.657	$5\frac{21}{32}$	0.567	$\frac{9}{16}$
		45.0	13.24	5.559	$5\frac{9}{16}$	0.469	$\frac{15}{32}$
		42.9	12.49	5.500	$5\frac{1}{2}$	0.410	$\frac{13}{32}$
		*252	15	36.0	10.59	5.500	$5\frac{1}{2}$	0.289	$\frac{9}{32}$
165	12	55.0	16.18	5.618	$5\frac{5}{8}$	0.828	$\frac{13}{16}$
		50.0	14.71	5.495	$5\frac{1}{2}$	0.705	$\frac{23}{32}$
		45.0	13.24	5.373	$5\frac{3}{8}$	0.583	$\frac{19}{32}$
		40.8	11.84	5.250	$5\frac{1}{4}$	0.460	$\frac{29}{64}$
166	12	35.0	10.29	5.086	$5\frac{3}{32}$	0.436	$\frac{7}{16}$
		31.8	9.26	5.000	5	0.350	$\frac{11}{32}$
*253	12	27.5	8.09	5.000	5	0.255	$\frac{1}{4}$

*Special.

THE PHOENIX IRON COMPANY

I-BEAMS

Moment of Inertia. Neutral Axis Per- pendicular to Web at Centre.	Moment of Inertia. Neutral Axis Coin- cident with Cen- tre Line of Web.	Radius of Gyration. Neutral Axis Per- pendicular to Web at Centre.	Radius of Gyration. Neutral Axis Co- incident with Cen- tre Line of Web.	Section Modulus. Neutral Axis Per- pendicular to Web at Centre.	Distance, Centre to Centre, required to make Radii of Gyration Equal.	Depth of Beam. Inches.
<i>I</i>	<i>I'</i>	<i>r</i>	<i>r'</i>	<i>s</i>	<i>I < D > I</i>	
1667.6	48.93	7.53	1.29	166.8	14.76	
1618.3	47.28	7.62	1.30	161.8	14.92	
1569.0	45.63	7.71	1.32	156.9	15.10	20
1519.6	43.98	7.80	1.33	152.0	15.30	
1470.3	42.33	7.90	1.34	147.0	15.47	
1268.9	30.25	7.58	1.17	126.9	14.98	
1219.9	29.04	7.70	1.19	122.0	15.21	20
1169.6	27.86	7.83	1.21	117.0	15.47	
921.3	24.62	6.69	1.09	102.4	13.20	
881.5	23.47	6.79	1.11	97.9	13.40	18
841.8	22.38	6.91	1.13	93.5	13.63	
795.6	21.19	7.07	1.15	88.4	13.95	
900.5	50.98	5.53	1.31	120.1	10.75	
872.9	48.37	5.59	1.32	116.4	10.86	
845.4	45.91	5.65	1.32	112.7	10.99	15
817.8	43.57	5.72	1.32	109.0	11.13	
795.5	41.76	5.78	1.32	106.1	11.25	
691.2	30.68	5.60	1.18	92.2	10.95	
663.6	29.00	5.68	1.19	88.5	11.11	15
636.0	27.42	5.77	1.20	84.8	11.29	
609.0	25.96	5.87	1.21	82.1	11.49	
511.0	17.06	5.62	1.02	68.1	11.05	
483.4	16.04	5.73	1.04	64.5	11.27	15
455.8	15.00	5.87	1.06	60.8	11.54	
441.7	14.62	5.95	1.08	58.9	11.70	
405.1	13.50	6.17	1.13	54.0	12.16	15
321.0	17.46	4.45	1.04	53.5	8.65	
303.3	16.12	4.54	1.05	50.6	8.83	12
285.7	14.89	4.65	1.06	47.6	9.06	
268.9	13.81	4.77	1.08	44.8	9.29	
228.3	10.07	4.71	0.99	38.0	9.21	12
215.8	9.50	4.83	1.01	36.0	9.45	
199.6	8.70	4.98	1.04	33.3	9.72	12

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Beam. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Flange Width.		Web Thickness.	
				Inches and Decimal Parts.	Inches and Fractional Parts.	Decimal Parts of Inch.	Fractional Parts of Inch.
221	10	40.0	11.76	5.099	$5\frac{3}{32}$	0.749	$\frac{3}{4}$
		35.0	10.29	4.952	$4\frac{61}{64}$	0.602	$\frac{39}{64}$
		30.0	8.82	4.805	$4\frac{13}{16}$	0.455	$\frac{15}{32}$
		25.4	7.38	4.660	$4\frac{21}{32}$	0.310	$\frac{5}{16}$
209	9	35.0	10.29	4.787	$4\frac{25}{32}$	0.747	$\frac{3}{4}$
		30.0	8.82	4.624	$4\frac{5}{8}$	0.584	$\frac{37}{64}$
		25.0	7.35	4.461	$4\frac{29}{64}$	0.421	$\frac{27}{64}$
		21.8	6.32	4.330	$4\frac{21}{64}$	0.290	$\frac{19}{64}$
210	8	25.5	7.50	4.276	$4\frac{17}{64}$	0.546	$\frac{17}{32}$
		23.0	6.76	4.184	$4\frac{3}{16}$	0.454	$\frac{7}{16}$
		20.5	6.03	4.092	$4\frac{3}{32}$	0.362	$\frac{23}{64}$
		18.4	5.34	4.000	4	0.270	$\frac{17}{64}$
211	7	20.0	5.88	3.868	$3\frac{7}{8}$	0.458	$\frac{15}{32}$
		17.5	5.15	3.763	$3\frac{49}{64}$	0.353	$\frac{23}{64}$
		15.3	4.43	3.660	$3\frac{21}{32}$	0.250	$\frac{1}{4}$
212	6	17.25	5.07	3.575	$3\frac{37}{64}$	0.475	$\frac{31}{64}$
		14.75	4.34	3.452	$3\frac{29}{64}$	0.352	$\frac{23}{64}$
		12.50	3.61	3.330	$3\frac{21}{64}$	0.230	$\frac{15}{64}$
214	5	14.75	4.34	3.294	$3\frac{19}{64}$	0.504	$\frac{1}{2}$
		12.25	3.60	3.147	$3\frac{9}{64}$	0.357	$\frac{11}{32}$
		10.00	2.87	3.000	3	0.210	$\frac{13}{64}$
213	4	10.50	3.09	2.880	$2\frac{7}{8}$	0.410	$\frac{13}{32}$
		9.50	2.79	2.807	$2\frac{13}{16}$	0.337	$\frac{11}{32}$
		8.50	2.50	2.733	$2\frac{47}{64}$	0.263	$\frac{17}{64}$
		7.70	2.21	2.660	$2\frac{21}{32}$	0.190	$\frac{3}{16}$
222	3	7.50	2.21	2.526	$2\frac{33}{64}$	0.366	$\frac{23}{64}$
		6.50	1.91	2.428	$2\frac{27}{64}$	0.268	$\frac{17}{64}$
		5.70	1.64	2.330	$2\frac{21}{64}$	0.170	$\frac{11}{64}$

THE PHOENIX IRON COMPANY

I-BEAMS

Moment of Inertia. Neutral Axis Perpen- dicular to Web at Centre.	Moment of Inertia. Neutral Axis Coinci- dent with Centre Line of Web.	Radius of Gyration. Neutral Axis Perpen- dicular to Web at Centre.	Radius of Gyration. Neutral Axis Coinci- dent with Centre Line of Web.	Section Modulus. Neutral Axis Perpen- dicular to Web at Centre.	Distance, Centre to Centre, required to make Radii of Gyra- tion Equal.	Depth of Beam. Inches.
<i>I</i>	<i>I'</i>	<i>r</i>	<i>r'</i>	<i>s</i>	<i>I < D > I</i>	
158.7	9.50	3.67	0.90	31.7	7.12	10
146.4	8.52	3.77	0.91	29.3	7.32	
134.2	7.65	3.90	0.93	26.8	7.57	
122.1	6.89	4.07	0.97	24.4	7.91	
111.8	7.31	3.29	0.84	24.8	6.36	9
101.9	6.42	3.40	0.85	22.6	6.58	
91.9	5.65	3.54	0.88	20.4	6.86	
84.9	5.16	3.67	0.90	18.9	7.12	
68.4	4.75	3.02	0.80	17.1	5.82	8
64.5	4.39	3.09	0.81	16.1	5.96	
60.6	4.07	3.17	0.82	15.1	6.12	
56.9	3.78	3.27	0.84	14.2	6.32	
42.2	3.24	2.68	0.74	12.1	5.15	7
39.2	2.94	2.76	0.76	11.2	5.31	
36.2	2.67	2.86	0.78	10.4	5.50	
26.2	2.36	2.27	0.68	8.7	4.33	6
24.0	2.09	2.35	0.69	8.0	4.49	
21.8	1.85	2.46	0.72	7.3	4.70	
15.2	1.70	1.87	0.63	6.1	5
13.6	1.45	1.94	0.63	5.4	....
12.1	1.23	2.05	0.65	4.8	....
7.1	1.01	1.52	0.57	3.6	4
6.7	0.93	1.55	0.58	3.4	....
6.4	0.85	1.59	0.58	3.2	....
6.0	0.77	1.64	0.59	3.0	....
2.9	0.60	1.15	0.52	1.9	3
2.7	0.53	1.19	0.52	1.8	....
2.5	0.46	1.23	0.53	1.7	....

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Channel. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Flange Width.		Web Thickness.	
				Inches and Decimal Parts.	Inches and Fractional Parts.	Decimal Parts of Inch.	Fractional Parts of Inch.
140	15	55.00	16.18	3.831	3 1/8	0.831	1 1/8
		50.00	14.71	3.733	3 3/8	0.733	1 1/8
		45.00	13.24	3.635	3 5/8	0.635	1 1/8
		40.00	11.76	3.537	3 7/8	0.537	1 1/8
		35.00	10.29	3.439	3 7/8	0.439	1 1/8
		33.90	9.90	3.400	3 7/8	0.400	1 1/8
141	12	40.00	11.76	3.418	3 7/8	0.758	1 1/8
		35.00	10.29	3.296	3 7/8	0.636	1 1/8
		30.00	8.82	3.173	3 7/8	0.513	1 1/8
		25.00	7.35	3.050	3 7/8	0.390	1 1/8
		20.70	6.03	2.940	2 1/8	0.280	1 1/8
130	10	35.00	10.29	3.188	3 7/8	0.828	1 1/8
		30.00	8.82	3.041	3 7/8	0.681	1 1/8
		25.00	7.35	2.894	2 7/8	0.534	1 1/8
		20.00	5.88	2.747	2 7/8	0.387	1 1/8
		15.30	4.47	2.600	2 7/8	0.240	1 1/8
233	9	25.00	7.35	2.815	2 1/8	0.615	1 1/8
		20.00	5.88	2.652	2 1/8	0.452	1 1/8
		15.00	4.41	2.488	2 1/8	0.288	1 1/8
		13.40	3.89	2.430	2 1/8	0.230	1 1/8
122	8	21.25	6.25	2.627	2 5/8	0.587	1 1/8
		18.75	5.51	2.535	2 5/8	0.495	1 1/8
		16.25	4.78	2.444	2 7/8	0.404	1 1/8
		13.75	4.04	2.352	2 7/8	0.312	1 1/8
		11.50	3.36	2.260	2 7/8	0.220	1 1/8
136	7	19.75	5.81	2.513	2 3/8	0.633	1 1/8
		17.25	5.07	2.408	2 3/8	0.528	1 1/8
		14.75	4.34	2.303	2 3/8	0.423	1 1/8
		12.25	3.60	2.198	2 3/8	0.318	1 1/8
		9.80	2.85	2.090	2 3/8	0.210	1 1/8
		15.50	4.56	2.288	2 3/8	0.568	1 1/8
144	6	13.00	3.82	2.165	2 3/8	0.445	1 1/8
		10.50	3.09	2.043	2 3/8	0.323	1 1/8
		8.20	2.39	1.920	1 5/8	0.200	1 1/8
		11.50	3.38	2.044	2 3/8	0.484	1 1/8
120	5	9.00	2.65	1.897	1 5/8	0.337	1 1/8
		6.70	1.95	1.750	1 1/2	0.190	1 1/8
		7.25	2.13	1.725	1 3/8	0.325	1 1/8
118	4	6.25	1.84	1.652	1 3/8	0.252	1 1/8
		5.40	1.56	1.580	1 3/8	0.180	1 1/8
		6.00	1.76	1.602	1 3/8	0.362	1 1/8
116	3	5.00	1.47	1.504	1 1/8	0.264	1 1/8
		4.10	1.19	1.410	1 1/8	0.170	1 1/8

THE PHOENIX IRON COMPANY

STANDARD CHANNELS

Moment of Inertia. Neutral Axis Perpen- dicular to Web at Centre.	Moment of Inertia. Neutral Axis Parallel with Centre Line of Web.	Radius of Gyration. Neutral Axis Perpen- dicular to Web at Centre.	Radius of Gyration. Neutral Axis Parallel with Centre Line of Web.	Section Modulus. Neutral Axis Perpen- dicular to Web at Centre.	Distance, Back to Back, required to make Radii of Gyration equal.	Distance of Centre of Gravity from Outside of Web.	Depth of Channel. Inches.
<i>I</i>	<i>I'</i>	<i>r</i>	<i>r'</i>	<i>S</i>	$\lceil \triangle D \triangleright \rfloor$	<i>x</i>	
430.2	12.19	5.16	0.868	57.4	8.53	0.82	
402.7	11.22	5.23	0.873	53.7	8.71	0.80	
375.1	10.29	5.32	0.882	50.0	8.92	0.79	
347.5	9.39	5.43	0.893	46.3	9.15	0.78	15
320.0	8.48	5.58	0.908	42.7	9.43	0.79	
312.6	8.23	5.62	0.912	41.7	9.50	0.79	
197.0	6.63	4.09	0.751	32.8	6.60	0.72	
179.3	5.90	4.17	0.757	29.9	6.81	0.69	
161.7	5.21	4.28	0.768	26.9	7.07	0.68	12
144.0	4.53	4.43	0.785	24.0	7.36	0.68	
128.1	3.91	4.61	0.805	21.4	7.67	0.70	
115.5	4.66	3.35	0.672	23.1	5.17	0.70	
103.2	3.90	3.42	0.672	20.6	5.40	0.65	
91.0	3.40	3.52	0.680	18.2	5.67	0.62	10
78.7	2.85	3.66	0.696	15.7	5.97	0.61	
66.9	2.30	3.87	0.718	13.4	6.33	0.64	
70.7	2.98	3.10	0.637	15.7	4.84	0.62	
60.8	2.45	3.21	0.646	13.5	5.12	0.58	
50.9	1.95	3.40	0.665	11.3	5.49	0.59	9
47.3	1.77	3.49	0.674	10.5	5.63	0.61	
47.8	2.25	2.77	0.600	11.9	4.23	0.59	
43.8	2.01	2.82	0.603	11.0	4.38	0.57	
39.9	1.78	2.89	0.610	10.0	4.54	0.56	8
36.0	1.55	2.98	0.619	9.0	4.72	0.56	
32.3	1.33	3.11	0.630	8.1	4.94	0.58	
33.2	1.85	2.39	0.565	9.5	3.48	0.58	
30.2	1.62	2.44	0.564	8.6	3.64	0.56	
27.2	1.40	2.50	0.568	7.8	3.80	0.54	7
24.2	1.19	2.59	0.575	6.9	3.99	0.53	
21.1	0.98	2.72	0.588	6.0	4.22	0.55	
19.5	1.28	2.07	0.529	6.5	2.91	0.55	
17.3	1.07	2.13	0.529	5.8	3.09	0.52	
15.1	0.88	2.21	0.534	5.0	3.28	0.50	6
13.0	0.70	2.34	0.542	4.3	3.52	0.52	
10.4	0.82	1.75	0.493	4.2	2.34	0.51	
8.9	0.64	1.83	0.493	3.6	2.56	0.48	5
7.4	0.48	1.95	0.498	3.0	2.79	0.49	
4.6	0.44	1.46	0.455	2.3	1.85	0.46	
4.2	0.38	1.51	0.454	2.1	1.96	0.46	4
3.8	0.32	1.56	0.453	1.9	2.06	0.46	
2.1	0.31	1.08	0.421	1.4	1.07	0.46	
1.8	0.25	1.12	0.415	1.2	1.19	0.44	3
1.6	0.20	1.17	0.409	1.1	1.31	0.44	

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Channel. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Flange Width.		Web Thickness.	
				Inches and Decimal Parts.	Inches and Fractional Parts.	Decimal Parts of Inch.	Fractional Parts of Inch.
124	15	69.12	20.33	4.3750	4 $\frac{3}{8}$	1.0000	1
		65.94	19.39	4.3125	4 $\frac{1}{16}$	0.9375	$\frac{11}{16}$
		62.75	18.46	4.2500	4 $\frac{1}{4}$	0.8750	$\frac{7}{8}$
		59.56	17.52	4.1875	4 $\frac{3}{16}$	0.8125	$\frac{11}{16}$
		56.37	16.58	4.1250	4 $\frac{1}{8}$	0.7500	$\frac{3}{4}$
		53.19	15.64	4.0625	4 $\frac{1}{16}$	0.6875	$\frac{11}{16}$
		50.00	14.71	4.0000	4	0.6250	$\frac{5}{8}$
246	13	55.00	16.18	4.53	4 $\frac{1}{2}$	0.9000	$\frac{33}{64}$
		50.00	14.71	4.42	4 $\frac{1}{32}$	0.7900	$\frac{35}{64}$
		45.00	13.24	4.30	4 $\frac{5}{16}$	0.6800	$\frac{11}{16}$
		40.00	11.76	4.19	4 $\frac{3}{16}$	0.5600	$\frac{9}{16}$
		37.00	10.88	4.12	4 $\frac{1}{8}$	0.5000	$\frac{1}{2}$
		35.00	10.29	4.08	4 $\frac{1}{16}$	0.4500	$\frac{7}{16}$
		32.00	9.30	4.00	4	0.3800	$\frac{3}{8}$
181	12	49.73	14.63	4.0000	4	0.8750	$\frac{7}{8}$
		47.18	13.88	3.9375	3 $\frac{1}{8}$	0.8125	$\frac{13}{16}$
		44.63	13.13	3.8750	3 $\frac{1}{4}$	0.7500	$\frac{3}{4}$
		42.08	12.38	3.8125	3 $\frac{1}{8}$	0.6875	$\frac{11}{16}$
		39.53	11.63	3.7500	3 $\frac{1}{4}$	0.6250	$\frac{5}{8}$
		36.98	10.88	3.6875	3 $\frac{1}{16}$	0.5625	$\frac{9}{16}$
		34.43	10.13	3.6250	3 $\frac{3}{8}$	0.5000	$\frac{1}{2}$
		31.88	9.38	3.5625	3 $\frac{9}{16}$	0.4375	$\frac{7}{16}$
		29.33	8.63	3.5000	3 $\frac{1}{2}$	0.3750	$\frac{3}{8}$
276	12	40.80	12.00	3.7000	3 $\frac{5}{8}$	0.7000	$\frac{45}{64}$
		36.80	10.80	3.6000	3 $\frac{1}{2}$	0.6000	$\frac{39}{64}$
		32.70	9.60	3.5000	3 $\frac{1}{4}$	0.5000	$\frac{1}{2}$
		30.60	9.00	3.4500	3 $\frac{3}{8}$	0.4500	$\frac{23}{64}$

THE PHOENIX IRON COMPANY

SPECIAL CHANNELS

Moment of Inertia. Neutral Axis Per- pendicular to Web at Centre.	Moment of Inertia. Neutral Axis Par- allel with Centre Line of Web.	Radius of Gyration. Neutral Axis Per- pendicular to Web at Centre.	Radius of Gyration. Neutral Axis Par- allel with Centre Line of Web.	Section Modulus. Neutral Axis Per- pendicular to Web at Centre.	Distance, Back to Back, required to make Radii of Gy- ration equal.	Distance of Centre of Gravity from Outside of Web.	Depth of Channel.
<i>I</i>	<i>I'</i>	<i>r</i>	<i>r'</i>	<i>s</i>	$\lceil < D > \rfloor$	<i>x</i>	
553.57	23.94	5.23	1.09	73.8	8.12	1.06	
535.99	23.04	5.27	1.09	71.5	8.22	1.05	
518.41	22.00	5.31	1.09	69.1	8.33	1.04	
500.83	20.92	5.35	1.09	66.8	8.43	1.03	15
483.26	19.95	5.40	1.09	64.4	8.54	1.03	
465.68	18.98	5.46	1.10	62.1	8.64	1.02	
448.10	17.99	5.51	1.10	59.7	8.75	1.02	
334.4	18.14	4.55	1.06	51.4	6.85	1.00	
313.7	16.71	4.62	1.07	48.3	7.02	0.98	
292.9	15.32	4.70	1.08	45.1	7.21	0.97	
272.2	13.94	4.81	1.09	41.9	7.42	0.97	13
259.8	13.10	4.89	1.10	40.0	7.57	0.98	
251.5	12.54	4.94	1.10	38.7	7.65	0.99	
237.5	11.54	5.05	1.11	36.5	7.83	1.01	
253.40	13.43	4.18	0.96	42.2	6.26	0.94	
244.40	12.78	4.20	0.96	40.7	6.35	0.93	
235.40	12.14	4.25	0.96	39.2	6.44	0.92	
226.40	11.52	4.29	0.97	37.7	6.55	0.91	
217.40	10.91	4.34	0.97	36.2	6.66	0.90	12
208.40	10.30	4.39	0.98	34.7	6.75	0.90	
199.40	9.69	4.45	0.98	33.2	6.87	0.90	
190.40	9.08	4.51	0.99	31.7	6.99	0.91	
181.40	8.44	4.58	0.99	30.2	7.10	0.93	
217.80	11.30	4.26	0.97	36.3	6.52	0.89	
203.40	10.30	4.34	0.98	33.9	6.68	0.89	
189.00	9.40	4.44	0.99	31.5	6.88	0.89	12
181.80	8.90	4.50	0.99	30.3	6.96	0.90	

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Channel. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Flange Width.		Web Thickness.	
				Inches and Decimal Parts.	Inches and Fractional Parts.	Decimal Parts of Inch.	Fractional Parts of Inch.
275	10	34.80	10.23	3.7000	$3\frac{1}{2}$	.6750	$\frac{1}{2}$
		31.40	9.23	3.6000	$3\frac{1}{2}$	.5750	$\frac{3}{4}$
		28.00	8.23	3.5000	$3\frac{1}{2}$	.4750	$\frac{1}{2}$
		26.30	7.73	3.4500	$3\frac{1}{2}$	.4250	$\frac{3}{4}$
		24.60	7.23	3.4000	$3\frac{1}{2}$	.3750	$\frac{1}{2}$
283	10	25.10	7.38	3.5500	$3\frac{1}{2}$	.4250	$\frac{3}{4}$
		23.40	6.88	3.5000	$3\frac{1}{2}$	.3750	$\frac{1}{2}$
		21.70	6.38	3.4500	$3\frac{1}{2}$	.3250	$\frac{3}{4}$
250	10	21.80	6.41	3.3750	$3\frac{1}{2}$	.3750	$\frac{1}{2}$
274	9	31.30	9.21	3.7000	$3\frac{1}{2}$	.6500	$\frac{3}{4}$
		28.30	8.31	3.6000	$3\frac{1}{2}$	.5500	$\frac{3}{4}$
		25.20	7.41	3.5000	$3\frac{1}{2}$	.4500	$\frac{3}{4}$
		23.70	6.96	3.4500	$3\frac{1}{2}$	.4000	$\frac{1}{2}$
273	8	28.00	8.23	3.7000	$3\frac{1}{2}$	.6250	$\frac{1}{2}$
		25.30	7.43	3.6000	$3\frac{1}{2}$	.5250	$\frac{1}{2}$
		22.60	6.63	3.5000	$3\frac{1}{2}$	.4250	$\frac{3}{4}$
		21.20	6.23	3.4500	$3\frac{1}{2}$	.3750	$\frac{1}{2}$
284	8	25.30	7.43	3.2250	$3\frac{7}{8}$	.6000	$\frac{1}{2}$
		22.60	6.63	3.1250	$3\frac{1}{2}$	.5000	$\frac{1}{2}$
		19.90	5.83	3.0250	$3\frac{1}{2}$	.4000	$\frac{1}{2}$
		19.20	5.63	3.0000	3	.3750	$\frac{1}{2}$
		18.50	5.43	2.9750	$2\frac{1}{2}$	.3500	$\frac{1}{2}$
272	7	24.90	7.30	3.7000	$3\frac{1}{2}$	.6000	$\frac{1}{2}$
		22.50	6.60	3.6000	$3\frac{1}{2}$	.5000	$\frac{1}{2}$
		20.10	5.90	3.5000	$3\frac{1}{2}$	.4000	$\frac{1}{2}$
		18.90	5.55	3.4500	$3\frac{1}{2}$	.3500	$\frac{1}{2}$
285	7	19.80	5.82	3.1000	$3\frac{3}{8}$	.4750	$\frac{1}{2}$
		17.40	5.12	3.0000	3	.3750	$\frac{1}{2}$
		16.30	4.77	2.9500	$2\frac{1}{2}$	.3250	$\frac{3}{4}$
271	6	15.30	4.50	3.5000	$3\frac{1}{2}$	.3400	$\frac{1}{2}$

THE PHOENIX IRON COMPANY

SPECIAL CHANNELS

Moment of Inertia. Neutral Axis Per- pendicular to Web at Centre.	Moment of Inertia. Neutral Axis Par- allel with Centre Line of Web.	Radius of Gyration. Neutral Axis Per- pendicular to Web at Centre.	Radius of Gyration. Neutral Axis Per- allel with Centre Line of Web.	Section Modulus. Neutral Axis Per- pendicular to Web at Centre.	Distance, Back to Back, required to make Radii of Gy- ration equal.	Distance of Centre of Gravity from Outside of Web.	Depth of Channel.
<i>I</i>	<i>I'</i>	<i>r</i>	<i>r'</i>	<i>s</i>	$\left[\begin{array}{c} \text{A} \\ \text{D} \\ \text{V} \end{array} \right]$	<i>x</i>	
133.60	10.40	3.61	1.01	26.7	5.04	.95	
125.20	9.50	3.69	1.01	25.0	5.18	.95	
116.90	8.60	3.77	1.02	23.4	5.34	.96	10
112.70	8.10	3.82	1.02	22.5	5.42	.97	
108.60	7.60	3.88	1.03	21.7	5.52	.98	
106.00	7.90	3.79	1.04	21.2	5.42	.94	
101.80	7.50	3.85	1.04	20.4	5.48	.96	10
97.60	7.00	3.91	1.05	19.5	5.58	.98	
91.30	6.22	3.78	.99	18.3	5.54	.87	10
99.40	9.70	3.29	1.03	22.1	4.28	.98	
93.40	8.80	3.35	1.03	20.7	4.42	.98	9
87.30	8.00	3.43	1.04	19.4	4.54	1.00	
84.30	7.50	3.48	1.04	18.7	4.62	1.01	
71.80	9.00	2.95	1.05	18.0	3.52	1.02	
67.60	8.20	3.02	1.05	16.9	3.62	1.02	8
63.30	7.40	3.09	1.05	15.8	3.72	1.04	
61.20	6.90	3.13	1.05	15.3	3.80	1.05	
62.60	5.80	2.90	.89	15.6	3.82	.86	
58.30	5.30	2.97	.89	14.6	3.96	.85	
54.00	4.70	3.05	.90	13.5	4.10	.86	8
53.00	4.50	3.07	.90	13.2	4.12	.87	
51.90	4.40	3.09	.90	13.0	4.16	.88	
49.90	8.30	2.62	1.07	14.3	2.68	1.06	
47.10	7.50	2.67	1.07	13.5	2.76	1.07	7
44.20	6.70	2.74	1.07	12.6	2.86	1.09	
42.80	6.30	2.78	1.07	12.2	2.92	1.11	
40.20	4.70	2.63	.90	11.5	3.14	.88	
37.30	4.20	2.70	.90	10.7	3.28	.90	7
35.90	3.90	2.74	.90	10.2	3.36	.91	
25.30	5.10	2.38	1.08	8.4	2.10	1.08	6

THE PHOENIX IRON COMPANY

ELEMENTS OF
ANGLES WITH UNEQUAL LEGS

Section Number.	Size. Inches.	Thickness. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Perpendicular Distances from Centre of Gravity to Back of	
					Longer Flange.	Shorter Flange.
197	*8x6	1 $\frac{1}{8}$	50.5	14.85	1.70	2.70
	*8x6	1 $\frac{1}{16}$	47.5	13.97	1.68	2.68
	*8x6	1	44.5	13.09	1.66	2.66
	*8x6	1 $\frac{1}{8}$	41.7	12.25	1.63	2.63
	*8x6	1 $\frac{1}{4}$	39.1	11.48	1.61	2.61
	*8x6	1 $\frac{3}{8}$	36.5	10.72	1.59	2.59
	*8x6	1 $\frac{1}{2}$	33.8	9.94	1.56	2.56
	*8x6	1 $\frac{3}{4}$	31.2	9.15	1.54	2.54
	*8x6	1 $\frac{7}{8}$	28.5	8.36	1.52	2.52
	*8x6	1 $\frac{9}{16}$	25.7	7.56	1.50	2.50
	*8x6	1 $\frac{1}{2}$	23.0	6.75	1.47	2.47
	*8x6	1 $\frac{1}{16}$	20.2	5.93	1.45	2.45
182	*8x3 $\frac{1}{2}$	1 $\frac{3}{16}$	29.6	8.68	0.85	3.10
	*8x3 $\frac{1}{2}$	1 $\frac{3}{4}$	27.5	8.06	0.82	3.07
	*8x3 $\frac{1}{2}$	1 $\frac{11}{16}$	25.3	7.43	0.80	3.05
	*8x3 $\frac{1}{2}$	1 $\frac{5}{8}$	23.2	6.80	0.78	3.03
	*8x3 $\frac{1}{2}$	1 $\frac{9}{16}$	21.0	6.15	0.75	3.00
	*8x3 $\frac{1}{2}$	1 $\frac{1}{2}$	18.7	5.50	0.73	2.98
	*8x3 $\frac{1}{2}$	1 $\frac{7}{16}$	16.5	4.84	0.70	2.95
	*7x5	1 $\frac{3}{16}$	32.6	9.59	1.34	2.34
241	*7x5	1 $\frac{1}{4}$	30.0	8.81	1.32	2.32
	*7x5	1 $\frac{11}{16}$	27.4	8.06	1.29	2.30
	*7x5	1 $\frac{5}{8}$	24.8	7.30	1.27	2.28
	*7x5	1 $\frac{9}{16}$	22.3	6.56	1.25	2.26
	*7x5	1 $\frac{1}{2}$	19.8	5.81	1.23	2.23
	*7x5	1 $\frac{7}{16}$	17.3	5.08	1.20	2.20
	*7x5	1 $\frac{3}{8}$	14.7	4.34	1.18	2.18
	*7x3 $\frac{1}{2}$	1	32.3	9.50	0.96	2.71
225	*7x3 $\frac{1}{2}$	1 $\frac{15}{16}$	30.5	8.97	0.94	2.69
	*7x3 $\frac{1}{2}$	1 $\frac{7}{8}$	28.7	8.42	0.91	2.66
	*7x3 $\frac{1}{2}$	1 $\frac{13}{16}$	26.8	7.87	0.89	2.64
	*7x3 $\frac{1}{2}$	1 $\frac{3}{4}$	24.9	7.31	0.87	2.62
	*7x3 $\frac{1}{2}$	1 $\frac{11}{16}$	23.0	6.75	0.85	2.60
	*7x3 $\frac{1}{2}$	1 $\frac{5}{8}$	21.0	6.17	0.82	2.57
	*7x3 $\frac{1}{2}$	1 $\frac{9}{16}$	19.1	5.59	0.80	2.55
	*7x3 $\frac{1}{2}$	1 $\frac{1}{2}$	17.0	5.00	0.78	2.53
	*7x3 $\frac{1}{2}$	1 $\frac{7}{16}$	15.0	4.40	0.75	2.50
	*7x3 $\frac{1}{2}$	1 $\frac{3}{8}$	13.0	3.80	0.73	2.48

*Special. See page 3.

THE PHOENIX IRON COMPANY

ANGLES

ANGLES WITH UNEQUAL LEGS

Moment of Inertia.		Section Modulus.		Radius of Gyration.			Section Number.	
Neutral Axis Parallel to		Neutral Axis Parallel to		Neutral Axis Parallel to				
Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.	Least Radius.		
43.43	90.66	10.10	17.11	1.71	2.47	1.27	197	
41.23	85.92	9.54	16.15	1.72	2.48	1.27		
39.03	81.21	8.99	15.21	1.73	2.49	1.28		
36.85	76.59	8.43	14.27	1.73	2.50	1.28		
34.86	72.32	7.94	13.41	1.74	2.51	1.28		
32.82	67.92	7.44	12.55	1.75	2.52	1.29		
30.72	63.42	6.92	11.67	1.76	2.53	1.29		
28.56	58.82	6.40	10.77	1.77	2.54	1.29		
26.33	54.10	5.88	9.87	1.77	2.54	1.30		
24.04	49.26	5.34	8.95	1.78	2.55	1.30		
21.68	44.31	4.79	8.02	1.79	2.56	1.30		
19.25	39.17	4.23	7.08	1.80	2.57	1.30		
6.67	55.85	2.51	11.39	0.88	2.54	0.73		182
6.27	52.26	2.34	10.60	0.88	2.55	0.73		
5.86	48.60	2.17	9.81	0.89	2.56	0.73		
5.44	44.78	2.00	9.01	0.90	2.57	0.74		
5.00	40.70	1.81	8.14	0.90	2.57	0.74		
4.52	36.70	1.63	7.31	0.91	2.58	0.74		
4.05	32.40	1.44	6.41	0.92	2.59	0.74		
18.59	43.76	5.08	9.40	1.43	2.19	1.11	241	
17.40	40.86	4.73	8.74	1.44	2.20	1.11		
16.21	37.96	4.38	8.08	1.45	2.21	1.12		
15.02	35.05	4.03	7.43	1.45	2.22	1.12		
13.68	31.84	3.66	6.72	1.46	2.23	1.12		
12.34	28.63	3.28	6.01	1.47	2.24	1.13		
11.00	25.42	2.91	5.30	1.48	2.25	1.13		
9.65	22.20	2.53	4.61	1.49	2.26	1.13		
7.53	45.37	2.96	10.58	0.89	2.19	0.74		225
7.18	43.13	2.80	10.00	0.89	2.19	0.74		
6.83	40.82	2.64	9.42	0.90	2.20	0.74		
6.46	38.45	2.48	8.82	0.91	2.21	0.74		
6.08	35.99	2.31	8.22	0.91	2.22	0.74		
5.69	33.47	2.14	7.60	0.92	2.23	0.74		
5.28	30.86	1.97	6.97	0.93	2.24	0.75		
4.86	28.18	1.80	6.33	0.93	2.25	0.75		
4.41	25.41	1.62	5.68	0.94	2.25	0.75		
3.95	22.56	1.47	5.01	0.95	2.26	0.76		
3.50	19.85	1.32	4.35	0.96	2.27	0.76		

THE PHOENIX IRON COMPANY

ELEMENTS OF
ANGLES WITH UNEQUAL LEGS

Section Number.	Size. Inches.	Thickness. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Perpendicular Dis- tances from Centre of Gravity to Back of		
					Longer Flange.	Shorter Flange.	
91	*6 x4	1	30.6	9.00	1.17	2.17	
	*6 x4	$\frac{15}{16}$	28.9	8.50	1.14	2.14	
	6 x4	$\frac{7}{8}$	27.2	8.00	1.12	2.12	
	6 x4	$\frac{13}{16}$	25.4	7.47	1.10	2.10	
	6 x4	$\frac{3}{4}$	23.6	6.94	1.08	2.08	
	6 x4	$\frac{11}{16}$	21.8	6.41	1.06	2.06	
	6 x4	$\frac{5}{8}$	20.0	5.88	1.03	2.03	
	6 x4	$\frac{9}{16}$	18.1	5.32	1.01	2.01	
	6 x4	$\frac{1}{2}$	16.2	4.76	0.99	1.99	
	6 x4	$\frac{7}{16}$	14.3	4.20	0.96	1.96	
	6 x4	$\frac{3}{8}$	12.3	3.62	0.94	1.94	
	6 x4	$\frac{5}{16}$	10.4	3.06	0.92	1.92	
	92	*6 x3 $\frac{1}{2}$	1	28.9	8.50	1.01	2.26
		*6 x3 $\frac{1}{2}$	$\frac{15}{16}$	27.3	8.03	0.99	2.24
6 x3 $\frac{1}{2}$		$\frac{7}{8}$	25.7	7.56	0.97	2.22	
6 x3 $\frac{1}{2}$		$\frac{13}{16}$	24.0	7.06	0.95	2.20	
6 x3 $\frac{1}{2}$		$\frac{3}{4}$	22.4	6.56	0.93	2.18	
6 x3 $\frac{1}{2}$		$\frac{11}{16}$	20.6	6.06	0.90	2.15	
6 x3 $\frac{1}{2}$		$\frac{5}{8}$	18.9	5.56	0.88	2.13	
6 x3 $\frac{1}{2}$		$\frac{9}{16}$	17.1	5.03	0.86	2.11	
6 x3 $\frac{1}{2}$		$\frac{1}{2}$	15.3	4.50	0.83	2.08	
6 x3 $\frac{1}{2}$		$\frac{7}{16}$	13.5	3.97	0.81	2.06	
6 x3 $\frac{1}{2}$		$\frac{3}{8}$	11.7	3.44	0.79	2.04	
6 x3 $\frac{1}{2}$		$\frac{5}{16}$	9.8	2.87	0.76	2.01	
41		*5 x4	$\frac{3}{4}$	22.0	6.47	1.17	1.67
		*5 x4	$\frac{11}{16}$	19.5	5.73	1.14	1.64
	*5 x4	$\frac{5}{8}$	17.8	5.23	1.12	1.62	
	*5 x4	$\frac{9}{16}$	16.2	4.76	1.10	1.60	
	*5 x4	$\frac{1}{2}$	14.5	4.26	1.07	1.57	
	*5 x4	$\frac{7}{16}$	12.8	3.76	1.05	1.55	
	*5 x4	$\frac{3}{8}$	11.0	3.23	1.03	1.53	

*Special. See page 3.

THE PHOENIX IRON COMPANY

ANGLES

ANGLES WITH UNEQUAL LEGS

Moment of Inertia.		Section Modulus.		Radius of Gyration.			Section Number.
Neutral Axis Parallel to		Neutral Axis Parallel to		Neutral Axis Parallel to		Least Radius.	
Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.		
10.75	30.75	3.79	8.02	1.09	1.85	0.85	91
10.26	29.26	3.59	7.59	1.10	1.86	0.85	
9.75	27.73	3.39	7.15	1.11	1.86	0.86	
9.23	26.15	3.18	6.70	1.11	1.87	0.86	
8.68	24.51	2.97	6.25	1.12	1.88	0.86	
8.11	22.82	2.76	5.78	1.13	1.89	0.86	
7.52	21.07	2.54	5.31	1.13	1.90	0.86	
6.91	19.26	2.31	4.83	1.14	1.90	0.87	
6.27	17.40	2.08	4.33	1.15	1.91	0.87	
5.60	15.46	1.85	3.83	1.16	1.92	0.87	
4.90	13.47	1.60	3.32	1.17	1.93	0.88	
4.17	11.43	1.35	2.81	1.18	1.94	0.88	
7.21	29.15	2.90	7.80	0.92	1.85	0.74	
6.88	27.84	2.74	7.41	0.93	1.86	0.74	
6.55	26.39	2.59	6.98	0.93	1.87	0.75	
6.20	24.89	2.43	6.55	0.94	1.88	0.75	
5.84	23.34	2.30	6.10	0.94	1.89	0.75	
5.47	21.74	2.11	5.65	0.95	1.89	0.75	
5.08	20.08	1.94	5.19	0.96	1.90	0.75	
4.67	18.37	1.77	4.72	0.96	1.91	0.75	
4.25	16.59	1.59	4.24	0.97	1.92	0.76	
3.81	14.76	1.41	3.75	0.98	1.93	0.76	
3.34	12.86	1.23	3.25	0.99	1.94	0.77	
2.90	10.91	1.05	2.75	1.00	1.95	0.77	
8.50	15.07	2.98	4.51	1.15	1.53	0.84	
7.70	13.62	2.69	4.05	1.16	1.54	0.84	
7.14	12.61	2.48	3.73	1.17	1.55	0.84	
6.56	11.55	2.26	3.39	1.18	1.56	0.85	
5.96	10.46	2.04	3.05	1.18	1.57	0.85	
5.32	9.32	1.81	2.70	1.19	1.58	0.85	
4.67	8.14	1.57	2.34	1.20	1.59	0.86	
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THE PHOENIX IRON COMPANY

ELEMENTS OF
ANGLES WITH UNEQUAL LEGS

Section Number.	Size. Inches.	Thickness Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Perpendicular Distances from Centre of Gravity to Back of	
					Longer Flange.	Shorter Flange.
93	5 × 3 $\frac{1}{2}$	$\frac{3}{8}$	19.8	5.81	1.00	1.75
	5 × 3 $\frac{1}{2}$	$\frac{1}{2}$	18.3	5.38	0.97	1.72
	5 × 3 $\frac{1}{2}$	$\frac{5}{16}$	16.8	4.94	0.95	1.70
	5 × 3 $\frac{1}{2}$	$\frac{3}{8}$	15.2	4.47	0.93	1.68
	5 × 3 $\frac{1}{2}$	$\frac{1}{4}$	13.6	4.00	0.91	1.66
	5 × 3 $\frac{1}{2}$	$\frac{3}{16}$	12.0	3.53	0.88	1.63
	5 × 3 $\frac{1}{2}$	$\frac{1}{8}$	10.4	3.06	0.86	1.61
42	5 × 3 $\frac{1}{2}$	$\frac{1}{8}$	8.7	2.56	0.84	1.59
	*5 × 3	$\frac{3}{8}$	18.5	5.44	0.84	1.84
	5 × 3	$\frac{1}{2}$	17.1	5.03	0.82	1.82
	5 × 3	$\frac{5}{16}$	15.7	4.62	0.80	1.80
	5 × 3	$\frac{3}{8}$	14.3	4.20	0.77	1.77
	5 × 3	$\frac{1}{4}$	12.8	3.76	0.75	1.75
	5 × 3	$\frac{3}{16}$	11.3	3.32	0.73	1.73
43	5 × 3	$\frac{1}{8}$	9.8	2.83	0.70	1.70
	5 × 3	$\frac{3}{16}$	8.2	2.41	0.68	1.68
	*4 $\frac{1}{2}$ × 3	$\frac{3}{8}$	18.5	5.44	0.88	1.63
	*4 $\frac{1}{2}$ × 3	$\frac{1}{2}$	16.5	4.85	0.85	1.60
	*4 $\frac{1}{2}$ × 3	$\frac{5}{16}$	15.0	4.41	0.83	1.58
	*4 $\frac{1}{2}$ × 3	$\frac{3}{8}$	13.5	3.97	0.81	1.56
	*4 $\frac{1}{2}$ × 3	$\frac{1}{4}$	12.0	3.53	0.79	1.54
94	*4 $\frac{1}{2}$ × 3	$\frac{3}{16}$	10.6	3.09	0.76	1.51
	*4 $\frac{1}{2}$ × 3	$\frac{1}{8}$	9.1	2.63	0.74	1.49
	*4 $\frac{1}{2}$ × 3	$\frac{3}{16}$	7.7	2.26	0.72	1.47
	*4 × 3 $\frac{1}{2}$	$\frac{3}{8}$	15.0	4.41	1.04	1.29
	*4 × 3 $\frac{1}{2}$	$\frac{1}{2}$	13.5	3.97	1.02	1.27
	*4 × 3 $\frac{1}{2}$	$\frac{5}{16}$	12.0	3.53	1.00	1.25
	*4 × 3 $\frac{1}{2}$	$\frac{3}{8}$	10.6	3.09	0.98	1.23
44	*4 × 3 $\frac{1}{2}$	$\frac{1}{4}$	9.1	2.68	0.96	1.21
	*4 × 3 $\frac{1}{2}$	$\frac{3}{16}$	7.7	2.26	0.93	1.18
	*4 × 3	$\frac{3}{8}$	16.5	4.85	0.93	1.43
	*4 × 3	$\frac{1}{2}$	15.3	4.50	0.90	1.40
	4 × 3	$\frac{5}{16}$	13.6	4.00	0.87	1.37
	4 × 3	$\frac{3}{8}$	12.4	3.65	0.85	1.35
	4 × 3	$\frac{1}{4}$	11.1	3.26	0.83	1.33
95	4 × 3	$\frac{3}{16}$	9.8	2.88	0.80	1.30
	4 × 3	$\frac{1}{8}$	8.5	2.50	0.78	1.28
	4 × 3	$\frac{3}{16}$	7.2	2.12	0.76	1.26
	4 × 3	$\frac{1}{4}$	5.8	1.69	0.74	1.24
	*3 $\frac{1}{2}$ × 3	$\frac{3}{8}$	12.5	3.67	0.92	1.17
	3 $\frac{1}{2}$ × 3	$\frac{1}{2}$	11.4	3.34	0.90	1.15
	3 $\frac{1}{2}$ × 3	$\frac{5}{16}$	10.2	3.00	0.88	1.13
95	3 $\frac{1}{2}$ × 3	$\frac{3}{8}$	9.1	2.65	0.85	1.10
	3 $\frac{1}{2}$ × 3	$\frac{1}{4}$	7.9	2.30	0.83	1.08
	3 $\frac{1}{2}$ × 3	$\frac{3}{16}$	6.6	1.93	0.81	1.06
	3 $\frac{1}{2}$ × 3	$\frac{1}{8}$	5.4	1.56	0.79	1.04

*Special. See Page 3.

THE PHOENIX IRON COMPANY

ANGLES

ANGLES WITH UNEQUAL LEGS

Moment of Inertia.		Section Modulus.		Radius of Gyration.			Section Number.	
Neutral Axis Parallel to		Neutral Axis Parallel to		Neutral Axis Parallel to		Least Radius.		
Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.			
5.55	13.92	2.22	4.28	0.98	1.55	0.75	93	
5.20	12.99	2.06	3.97	0.98	1.56	0.75		
4.83	12.03	1.90	3.65	0.99	1.56	0.75		
4.45	11.03	1.73	3.32	1.00	1.57	0.75		
4.05	9.99	1.56	2.99	1.01	1.58	0.75		
3.63	8.90	1.39	2.64	1.01	1.59	0.76		
3.18	7.78	1.21	2.29	1.02	1.60	0.76		
2.72	6.60	1.02	1.94	1.03	1.61	0.76		
3.51	13.15	1.62	4.16	0.80	1.55	0.64		42
3.30	12.28	1.52	3.86	0.81	1.56	0.64		
3.06	11.37	1.39	3.55	0.82	1.57	0.64		
2.83	10.43	1.27	3.23	0.82	1.58	0.65		
2.58	9.45	1.15	2.91	0.83	1.59	0.65		
2.32	8.43	1.02	2.58	0.84	1.60	0.65		
2.04	7.37	0.89	2.24	0.84	1.61	0.65		
1.75	6.26	0.75	1.89	0.85	1.61	0.66		
3.51	10.05	1.65	3.47	0.81	1.38	0.64	43	
3.21	9.13	1.49	3.14	0.82	1.39	0.64		
2.98	8.44	1.37	2.89	0.83	1.40	0.64		
2.75	7.75	1.25	2.64	0.85	1.41	0.64		
2.51	7.04	1.13	2.37	0.85	1.42	0.65		
2.30	6.29	1.01	2.10	0.85	1.43	0.65		
1.98	5.50	0.88	1.83	0.86	1.44	0.66		
1.73	4.69	0.75	1.54	0.87	1.44	0.66		
4.52	6.37	1.84	2.35	1.02	1.22	0.72		94
4.17	5.86	1.68	2.15	1.03	1.23	0.72		
3.79	5.32	1.52	1.93	1.04	1.23	0.72		
3.40	4.76	1.35	1.72	1.05	1.24	0.72		
2.99	4.18	1.18	1.50	1.06	1.25	0.73		
2.59	3.56	1.01	1.26	1.07	1.26	0.73		
3.33	7.09	1.62	2.77	0.84	1.22	0.64	44	
3.14	6.65	1.50	2.57	0.84	1.22	0.64		
2.87	6.03	1.35	2.30	0.85	1.23	0.64		
2.66	5.55	1.23	2.09	0.86	1.24	0.64		
2.42	5.05	1.12	1.89	0.86	1.25	0.64		
2.18	4.52	0.99	1.68	0.87	1.25	0.64		
1.92	3.96	0.87	1.46	0.88	1.26	0.64		
1.65	3.38	0.74	1.23	0.89	1.27	0.65		
1.40	2.80	0.60	1.00	0.89	1.28	0.65		
2.76	4.11	1.33	1.76	0.87	1.06	0.62		95
2.55	3.79	1.21	1.61	0.87	1.07	0.62		
2.33	3.45	1.10	1.45	0.88	1.07	0.62		
2.09	3.10	0.98	1.29	0.89	1.08	0.62		
1.85	2.72	0.85	1.13	0.90	1.09	0.62		
1.58	2.33	0.72	0.96	0.90	1.10	0.63		
1.30	1.90	0.58	0.78	0.91	1.11	0.63		

ELEMENTS OF
ANGLES WITH UNEQUAL LEGS

Section Number.	Size. Inches.	Thickness, Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Perpendicular Dis- tances from Centre of Gravity to Back of	
					Longer Flange.	Shorter Flange.
90	*3½×2½	5/16	12.2	3.59	76.0	1.26
	*3½×2½	7/16	10.8	3.18	73.0	1.23
	3½×2½	9/16	9.6	2.82	70.0	1.20
	3½×2½	11/16	8.3	2.43	68.0	1.18
	3½×2½	13/16	7.2	2.11	66.0	1.16
	3½×2½	15/16	6.1	1.78	64.0	1.14
	3½×2½	1	4.9	1.44	61.0	1.11
86	*3 ×2½	5/16	11.0	3.23	0.80	1.05
	*3 ×2½	7/16	10.0	2.94	0.78	1.03
	*3 ×2½	9/16	8.5	2.50	0.75	1.00
	3 ×2½	11/16	7.6	2.21	0.73	0.98
	3 ×2½	13/16	6.6	1.94	0.71	0.96
	3 ×2½	15/16	5.6	1.62	0.68	0.93
	3 ×2½	1	4.5	1.31	0.66	0.91
109	*3 ×2	1/2	8.1	2.38	0.58	1.08
	*3 ×2	7/16	7.1	2.09	0.56	1.06
	*3 ×2	9/16	6.1	1.79	0.54	1.04
	*3 ×2	11/16	5.0	1.47	0.52	1.02
	*3 ×2	13/16	4.1	1.21	0.49	0.99
	*3 ×2	15/16	3.1	0.90	0.47	0.97
184	*2½×2	1/2	7.6	2.23	0.65	0.90
	*2½×2	7/16	6.3	1.85	0.61	0.86
	2½×2	9/16	5.3	1.55	0.58	0.83
	2½×2	11/16	4.5	1.32	0.56	0.81
	2½×2	13/16	3.62	1.06	0.54	0.79
	2½×2	15/16	2.75	0.81	0.51	0.76
96	*2¼×1½	3/8	4.40	1.27	0.44	0.81
	*2¼×1½	5/16	3.66	1.07	0.42	0.79
	*2¼×1½	7/16	2.98	0.88	0.39	0.77
	*2¼×1½	9/16	2.28	0.67	0.37	0.75
185	*2 ×1¼	3/8	3.7	1.09	0.42	0.80
	*2 ×1¼	5/16	3.2	0.94	0.39	0.77
	*2 ×1¼	7/16	2.6	0.76	0.35	0.73
	*2 ×1¼	9/16	2.0	0.59	0.31	0.69

*Special. See page 3.

THE PHOENIX IRON COMPANY

ANGLES

ANGLES WITH UNEQUAL LEGS

Moment of Inertia.		Section Modulus.		Radius of Gyration.			Section Number.
Neutral Axis Parallel to		Neutral Axis Parallel to		Neutral Axis Parallel to		Least Radius.	
Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.	Longer Flange.	Shorter Flange.		
1.67	3.99	0.95	1.78	0.69	1.07	0.53	90
1.51	3.61	0.85	1.59	0.70	1.08	0.53	
1.36	3.24	0.76	1.41	0.70	1.09	0.53	
1.23	2.91	0.68	1.26	0.71	1.09	0.54	
1.09	2.56	0.59	1.09	0.72	1.10	0.54	
0.94	2.19	0.50	0.93	0.73	1.11	0.54	
0.78	1.80	0.41	0.75	0.74	1.12	0.54	
1.56	2.52	0.91	1.28	0.71	0.90	0.52	86
1.44	2.32	0.83	1.17	0.71	0.90	0.52	
1.30	2.08	0.74	1.04	0.72	0.91	0.52	
1.18	1.88	0.66	0.93	0.73	0.92	0.52	
1.04	1.66	0.58	0.81	0.74	0.93	0.52	
0.90	1.42	0.49	0.69	0.74	0.94	0.53	
0.74	1.17	0.40	0.56	0.75	0.95	0.53	
0.67	1.92	0.47	1.00	0.55	0.92	0.43	109
0.61	1.73	0.42	0.89	0.55	0.93	0.43	
0.54	1.53	0.37	0.78	0.56	0.94	0.43	
0.47	1.32	0.32	0.66	0.57	0.95	0.43	
0.39	1.09	0.25	0.54	0.57	0.95	0.43	
0.31	0.84	0.20	0.41	0.58	0.97	0.44	
0.70	1.25	0.50	0.76	0.55	0.75	0.42		184
0.60	1.06	0.43	0.64	0.56	0.76	0.42	
0.52	0.91	0.36	0.55	0.58	0.77	0.42	
0.45	0.79	0.31	0.47	0.58	0.78	0.42	
0.37	0.65	0.25	0.38	0.59	0.78	0.42	
0.29	0.51	0.20	0.29	0.60	0.79	0.43	
0.21	0.61	0.20	0.42	0.41	0.69	0.32	96
0.19	0.53	0.17	0.36	0.42	0.70	0.32	
0.16	0.44	0.14	0.30	0.42	0.71	0.32	
0.12	0.34	0.11	0.23	0.43	0.72	0.33	
0.17	0.50	0.20	0.41	0.38	0.65	0.32	185
0.13	0.41	0.15	0.33	0.37	0.65	0.32	
0.10	0.32	0.11	0.25	0.36	0.64	0.31	
0.07	0.23	0.07	0.18	0.35	0.64	0.30	

THE PHOENIX IRON COMPANY

ELEMENTS OF ANGLES
ANGLES WITH EQUAL LEGS

Section No.	Size, in Inches.	Thickness, Inches.	Weight per Foot, Pounds.	Area of Section, Square Inches.	Distance of Cen. of Grav. from Back of Flange, Inches.	Mom. of Inertia, Neutral Axis Parallel to Flg.	Section Modulus, Neutral Axis Parallel to Flg.	Rad. of Gyration, Neutral Axis Parallel to Flg.	Least Radius of Gyration.
240	8x8	1 $\frac{1}{8}$	58.0	17.06	2.41	97.97	17.53	2.42	1.55
	8x8	1 $\frac{1}{16}$	54.8	16.12	2.39	93.53	16.67	2.43	1.56
	8x8	1	51.6	15.18	2.37	88.98	15.80	2.44	1.56
	8x8	1 $\frac{1}{8}$	48.4	14.24	2.34	84.33	14.91	2.44	1.56
	8x8	$\frac{7}{8}$	45.2	13.29	2.32	79.58	14.01	2.45	1.56
	8x8	1 $\frac{1}{4}$	42.0	12.34	2.30	74.71	13.11	2.46	1.57
	8x8	$\frac{3}{4}$	38.9	11.44	2.28	69.74	12.18	2.47	1.57
	8x8	1 $\frac{1}{2}$	35.8	10.53	2.25	64.64	11.25	2.48	1.58
	8x8	$\frac{5}{8}$	32.7	9.62	2.23	59.42	10.30	2.49	1.58
	8x8	1 $\frac{3}{8}$	29.6	8.71	2.21	54.09	9.34	2.50	1.58
	8x8	$\frac{1}{2}$	26.4	7.76	2.19	48.63	8.37	2.51	1.58
	127	6x6	1	37.4	11.00	1.86	35.46	8.57	1.80	1.16
6x6		1 $\frac{1}{8}$	35.3	10.38	1.84	33.72	8.11	1.80	1.16
6x6		$\frac{7}{8}$	33.1	9.73	1.82	31.92	7.64	1.81	1.17
6x6		1 $\frac{1}{4}$	31.0	9.12	1.80	30.06	7.15	1.82	1.17
6x6		$\frac{3}{4}$	28.7	8.44	1.78	28.15	6.66	1.83	1.17
6x6		1 $\frac{1}{2}$	26.5	7.79	1.75	26.19	6.17	1.83	1.17
6x6		$\frac{5}{8}$	24.2	7.12	1.73	24.16	5.66	1.84	1.17
6x6		1 $\frac{3}{8}$	21.9	6.44	1.71	22.07	5.14	1.85	1.18
6x6		$\frac{1}{2}$	19.6	5.76	1.68	19.91	4.61	1.86	1.18
6x6		1 $\frac{7}{8}$	17.2	5.06	1.66	17.68	4.07	1.87	1.19
6x6		$\frac{3}{8}$	14.9	4.38	1.64	15.39	3.53	1.88	1.19
126		*5x5	1 $\frac{1}{8}$	25.4	7.47	1.56	16.88	4.90	1.49	0.96
	*5x5	$\frac{3}{4}$	23.6	6.94	1.52	15.80	4.59	1.50	0.97
	*5x5	1 $\frac{1}{4}$	21.8	6.40	1.50	14.70	4.25	1.51	0.97
	*5x5	$\frac{5}{8}$	20.0	5.88	1.48	13.58	3.86	1.52	0.97
	*5x5	1 $\frac{3}{8}$	18.1	5.32	1.46	12.44	3.51	1.53	0.98
	*5x5	$\frac{1}{2}$	16.2	4.76	1.43	11.25	3.15	1.54	0.98
	*5x5	1 $\frac{7}{8}$	14.3	4.20	1.41	10.02	2.79	1.55	0.98
	*5x5	$\frac{3}{8}$	12.3	3.62	1.39	8.74	2.42	1.56	0.99
14	*4x4	1 $\frac{1}{8}$	20.7	6.18	1.30	8.46	3.12	1.17	0.77
	4x4	$\frac{3}{4}$	19.1	5.71	1.28	7.93	2.90	1.18	0.77
	4x4	1 $\frac{1}{4}$	17.5	5.21	1.25	7.36	2.67	1.19	0.77
	4x4	$\frac{5}{8}$	15.7	4.62	1.23	6.66	2.40	1.20	0.77
	4x4	1 $\frac{3}{8}$	14.3	4.20	1.21	6.12	2.19	1.21	0.78
	4x4	$\frac{1}{2}$	12.8	3.76	1.18	5.56	1.97	1.22	0.78
	4x4	1 $\frac{7}{8}$	11.3	3.32	1.16	4.97	1.75	1.23	0.78
	4x4	$\frac{3}{8}$	9.8	2.88	1.14	4.36	1.52	1.23	0.79
	4x4	1 $\frac{1}{8}$	8.2	2.41	1.12	3.71	1.29	1.24	0.79
	4x4	$\frac{1}{4}$	6.6	1.94	1.09	3.01	1.06	1.25	0.79

*Special. See page 3.

THE PHOENIX IRON COMPANY

ELEMENTS OF ANGLES
ANGLES WITH EQUAL LEGS

Section No.	Size, in Inches.	Thickness, Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Distance of Cen. of Grav. from Back of Flange. Inches.	Mom. of Inertia. Neutral Axis Parallel to Flg.	Section Modulus Neutral Axis Parallel to Flg.	Rad. of Gyration Neutral Axis Parallel to Flg.	Least Radius of Gyration.
15	*3 1/2 x 3 1/2	3/8	16.0	4.70	1.15	4.96	2.110	1.03	0.67
	*3 1/2 x 3 1/2	1/2	14.8	4.35	1.12	4.65	1.960	1.04	0.67
	3 1/2 x 3 1/2	5/16	13.6	4.00	1.10	4.33	1.810	1.04	0.68
	3 1/2 x 3 1/2	3/8	12.4	3.65	1.08	3.99	1.650	1.05	0.68
	3 1/2 x 3 1/2	1/2	11.1	3.26	1.06	3.64	1.490	1.06	0.68
	3 1/2 x 3 1/2	5/8	9.8	2.88	1.04	3.26	1.320	1.07	0.68
	3 1/2 x 3 1/2	3/4	8.5	2.50	1.01	2.87	1.150	1.07	0.69
	3 1/2 x 3 1/2	7/8	7.2	2.12	0.99	2.45	0.980	1.08	0.69
16	3 x 3	1/2	5.8	1.69	0.97	2.00	0.790	1.09	0.69
	*3 x 3	3/8	14.4	4.23	1.03	3.10	1.580	0.86	0.57
	*3 x 3	1/2	13.0	3.85	1.01	2.89	1.450	0.87	0.57
	*3 x 3	5/8	11.5	3.38	0.98	2.62	1.300	0.88	0.57
	*3 x 3	3/4	10.4	3.06	0.95	2.43	1.190	0.89	0.58
	3 x 3	1/2	9.4	2.76	0.93	2.22	1.070	0.90	0.58
	3 x 3	5/8	8.3	2.44	0.91	1.99	0.950	0.91	0.58
	3 x 3	3/4	7.2	2.12	0.89	1.76	0.830	0.91	0.58
17	3 x 3	7/8	6.1	1.79	0.87	1.51	0.710	0.92	0.59
	3 x 3	1	4.9	1.44	0.84	1.24	0.580	0.93	0.59
	*2 1/2 x 2 1/2	5/8	8.6	2.73	0.84	1.46	0.870	0.73	0.47
	*2 1/2 x 2 1/2	3/4	7.7	2.25	0.81	1.23	0.770	0.74	0.47
	2 1/2 x 2 1/2	1/2	6.8	2.00	0.78	1.11	0.670	0.75	0.48
	2 1/2 x 2 1/2	5/8	5.9	1.73	0.76	0.98	0.570	0.75	0.48
	2 1/2 x 2 1/2	3/4	5.0	1.47	0.74	0.85	0.480	0.76	0.49
	2 1/2 x 2 1/2	1/2	4.1	1.21	0.72	0.70	0.390	0.77	0.49
18	2 1/2 x 2 1/2	3/4	3.5	1.03	0.71	0.62	0.345	0.78	0.49
	2 1/2 x 2 1/2	1/2	7.2	2.12	0.74	0.89	0.590	0.66	0.43
	2 1/2 x 2 1/2	5/8	6.2	1.82	0.72	0.79	0.520	0.67	0.43
	2 1/2 x 2 1/2	3/4	5.3	1.56	0.70	0.70	0.450	0.67	0.43
	2 1/2 x 2 1/2	1/2	4.5	1.32	0.68	0.61	0.390	0.68	0.44
	2 1/2 x 2 1/2	5/8	3.62	1.06	0.66	0.51	0.320	0.69	0.44
	2 1/2 x 2 1/2	3/4	2.75	0.82	0.63	0.39	0.240	0.70	0.44
	2 1/2 x 2 1/2	1/2	5.30	1.56	0.67	0.54	0.420	0.58	0.38
19	2 x 2	5/8	4.70	1.36	0.64	0.48	0.360	0.59	0.39
	2 x 2	3/4	3.92	1.15	0.61	0.42	0.300	0.60	0.39
	2 x 2	1/2	3.19	0.94	0.59	0.35	0.250	0.61	0.39
	2 x 2	5/8	2.44	0.71	0.57	0.28	0.190	0.62	0.40
	2 x 2	3/4	2.44	0.71	0.57	0.28	0.190	0.62	0.40
20	*1 1/2 x 1 1/2	3/8	4.2	1.24	0.57	0.32	0.270	0.51	0.34
	*1 1/2 x 1 1/2	1/2	3.5	1.02	0.55	0.27	0.230	0.52	0.34
	*1 1/2 x 1 1/2	5/8	2.8	0.83	0.53	0.23	0.190	0.53	0.34
	*1 1/2 x 1 1/2	3/4	2.1	0.62	0.51	0.18	0.140	0.54	0.35
20	1 1/2 x 1 1/2	1/2	3.6	1.06	0.51	0.19	0.190	0.44	0.29
	1 1/2 x 1 1/2	5/8	3.0	0.88	0.49	0.16	0.162	0.44	0.29
	1 1/2 x 1 1/2	3/4	2.4	0.70	0.47	0.14	0.134	0.45	0.29
	1 1/2 x 1 1/2	1/2	1.8	0.53	0.44	0.11	0.104	0.46	0.29

*Special. See page 3.

THE PHOENIX IRON COMPANY

ELEMENTS OF

Section Number.	Depth of Web. Inches.	Width of Flange. Inches.	Thickness of Metal. Inches.	Weight per Foot. Pounds.	Area of Section. Square Inches.	Moments of Inertia.	
						Neutral Axis through Centre of Gravity Per- pendicular to Web.	Neutral Axis through Centre of Gravity Co- incident with Web.
149	6	3 $\frac{1}{2}$	$\frac{3}{16}$	15.6	4.59	25.32	9.11
	6 $\frac{1}{16}$	3 $\frac{9}{16}$	$\frac{1}{16}$	18.3	5.39	29.80	10.95
	6 $\frac{1}{8}$	3 $\frac{5}{8}$	$\frac{1}{2}$	21.0	6.19	34.36	12.87
242	6	3 $\frac{1}{2}$	$\frac{9}{16}$	22.7	6.68	34.64	12.59
	6 $\frac{1}{16}$	3 $\frac{9}{16}$	$\frac{3}{8}$	25.4	7.46	38.86	14.42
	6 $\frac{1}{8}$	3 $\frac{5}{8}$	$\frac{11}{16}$	28.0	8.25	43.18	16.34
243	6	3 $\frac{1}{2}$	$\frac{3}{4}$	29.3	8.63	42.12	15.44
	6 $\frac{1}{16}$	3 $\frac{9}{16}$	$\frac{13}{16}$	32.0	9.40	46.13	17.27
	6 $\frac{1}{8}$	3 $\frac{5}{8}$	$\frac{7}{8}$	34.6	10.17	50.22	19.18
236	5	3 $\frac{1}{4}$	$\frac{5}{16}$	11.6	3.40	13.36	6.18
	5 $\frac{1}{16}$	3 $\frac{5}{16}$	$\frac{3}{8}$	13.9	4.10	16.18	7.65
	5 $\frac{1}{8}$	3 $\frac{3}{8}$	$\frac{1}{16}$	16.4	4.81	19.07	9.20
235	5	3 $\frac{1}{4}$	$\frac{1}{2}$	17.8	5.25	19.19	9.05
	5 $\frac{1}{16}$	3 $\frac{5}{16}$	$\frac{9}{16}$	20.2	5.94	21.83	10.51
	5 $\frac{1}{8}$	3 $\frac{3}{8}$	$\frac{5}{8}$	22.6	6.64	24.53	12.06
234	5	3 $\frac{1}{4}$	$\frac{11}{16}$	23.7	6.96	23.68	11.37
	5 $\frac{1}{16}$	3 $\frac{5}{16}$	$\frac{3}{4}$	26.0	7.64	26.16	12.83
	5 $\frac{1}{8}$	3 $\frac{3}{8}$	$\frac{13}{16}$	28.3	8.33	28.70	14.36
239	4	3 $\frac{1}{16}$	$\frac{1}{4}$	8.2	2.41	6.28	4.23
	4 $\frac{1}{16}$	3 $\frac{1}{8}$	$\frac{5}{16}$	10.3	3.03	7.94	5.46
	4 $\frac{1}{8}$	3 $\frac{3}{16}$	$\frac{3}{8}$	12.4	3.66	9.63	6.77
238	4	3 $\frac{1}{16}$	$\frac{7}{16}$	13.8	4.05	9.66	6.73
	4 $\frac{1}{16}$	3 $\frac{1}{8}$	$\frac{1}{2}$	15.8	4.66	11.18	7.96
	4 $\frac{1}{8}$	3 $\frac{3}{16}$	$\frac{9}{16}$	17.9	5.27	12.74	9.26
237	4	3 $\frac{1}{16}$	$\frac{5}{8}$	18.9	5.55	12.11	8.73
	4 $\frac{1}{16}$	3 $\frac{1}{8}$	$\frac{11}{16}$	20.9	6.14	13.52	9.95
	4 $\frac{1}{8}$	3 $\frac{3}{16}$	$\frac{3}{4}$	22.9	6.75	14.97	11.24
229	3	2 $\frac{11}{16}$	$\frac{1}{4}$	6.7	1.97	2.87	2.81
	3 $\frac{1}{16}$	2 $\frac{3}{4}$	$\frac{5}{16}$	8.4	2.48	3.64	3.64
230	3	2 $\frac{11}{16}$	$\frac{3}{8}$	9.7	2.86	3.85	3.92
	3 $\frac{1}{16}$	2 $\frac{3}{4}$	$\frac{7}{16}$	11.4	3.36	4.57	4.75
231	3	2 $\frac{11}{16}$	$\frac{1}{2}$	12.5	3.69	4.59	4.85
	3 $\frac{1}{16}$	2 $\frac{3}{4}$	$\frac{9}{16}$	14.2	4.18	5.26	5.70

STANDARD Z-BARS

Section Moduli. S		Radii of Gyration. r			Section Number.
Neutral Axis through Centre of Gravity Perpendicular to Web.	Neutral Axis through Centre of Gravity Coincident with Web.	Neutral Axis through Centre of Gravity Perpendicular to Web.	Neutral Axis through Centre of Gravity Coincident with Web.	Least Radius, Neutral Axis Diagonal.	
8.44	2.75	2.35	1.41	0.83	
9.83	3.27	2.35	1.43	0.84	149
11.22	3.81	2.36	1.44	0.84	
11.55	3.91	2.28	1.37	0.81	
12.82	4.43	2.28	1.39	0.82	242
14.10	4.98	2.29	1.41	0.84	
14.04	4.94	2.21	1.34	0.81	
15.22	5.47	2.22	1.36	0.82	243
16.40	6.02	2.22	1.37	0.83	
5.34	2.00	1.98	1.35	0.75	
6.39	2.45	1.99	1.37	0.76	236
7.44	2.92	1.99	1.38	0.77	
7.68	3.02	1.91	1.31	0.74	
8.62	3.47	1.91	1.33	0.75	235
9.57	3.94	1.92	1.35	0.76	
9.47	3.91	1.84	1.28	0.73	
10.34	4.37	1.85	1.30	0.75	234
11.20	4.84	1.86	1.31	0.76	
3.14	1.44	1.62	1.33	0.67	
3.91	1.84	1.62	1.34	0.68	239
4.67	2.26	1.62	1.36	0.69	
4.83	2.37	1.55	1.29	0.66	
5.50	2.77	1.55	1.31	0.67	238
6.18	3.19	1.55	1.33	0.69	
6.05	3.18	1.48	1.25	0.66	
6.65	3.58	1.48	1.27	0.67	237
7.26	4.00	1.49	1.29	0.69	
1.92	1.10	1.21	1.19	0.55	
2.38	1.40	1.21	1.21	0.56	229
2.57	1.57	1.16	1.17	0.55	
2.98	1.88	1.17	1.19	0.56	230
3.06	1.99	1.12	1.15	0.55	
3.43	2.31	1.12	1.17	0.56	231

THE PHOENIX IRON COMPANY

ELEMENTS OF

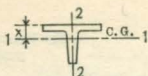
Section Number.	Size, in Inches.		Thickness of Flange, in Inches.	Thickness of Stem, in Inches	Weight per Foot, Pounds.
	Flange.	Stem.			
203	6	5½	1	1¼ to 1½	39.4
202	6	4½	½	1½ " 1¾	28.2
244	3	3	⅞ to ⅞	1½ " 1½	6.8
102	3	3	⅞ " ⅞	1½ " 1½	7.9
245	3	3	⅞ " ⅞	1½ " 1½	9.0
204	3½	2½	⅞ to ⅞	1½ " 1½	6.75
85	4	2	⅞ to ⅞	1½ " 1½	6.25
98	2½	2½	1½ to 1½	1½ " 1½	6.00
84	2½	2½	⅞ " ⅞	1½ " 1½	5.50
105	2	2	½ " ½	1½ " 1½	3.70

ELEMENTS OF BULB

Section Number.	Size, in Inches.		Web Thickness, in Inches.	Weight per Foot, Pounds.
	Depth.	Flange.		
281	10	3½	.725	35.2
			.675	33.2
			.625	31.1
			.575	29.1
			.525	26.9
			.475	24.9
280	9	3½	.675	30.4
			.625	28.6
			.575	26.6
			.525	24.8
			.475	22.7
			.425	20.9
279	8	3½	.650	26.7
			.600	25.1
			.550	23.2
			.500	21.6
			.450	19.6
			.400	18.0

THE PHOENIX IRON COMPANY

TEES



I = Mom. of Inertia.
 s = Section Modulus.
 r = Radius of Gyration.

Area of Section. Sq. in.	Axis 1-1				Axis 2-2		
	I	r	s <i>least</i>	x <i>in.</i>	I	r	s
11.59	27.87	1.55	7.94	1.74	18.63	1.27	6.21
8.29	14.32	1.31	4.58	1.37	13.78	1.29	4.59
2.00	1.58	.89	.74	.86	.75	.61	.50
2.32	1.82	.89	.86	.88	.90	.62	.60
2.65	2.06	.88	.98	.90	1.05	.63	.70
1.98	1.04	.72	.57	.68	1.20	.78	.84
1.84	.42	.48	.27	.43	1.71	.96	.86
1.77	1.13	.80	.58	.79	.48	.52	.38
1.61	.88	.74	.50	.73	.44	.52	.35
1.09	.37	.58	.26	.59	.18	.42	.18

ANGLES

Area of Section. Sq. in.	Axis 1-1				Axis 2-2			
	I	r	s <i>least</i>	x <i>in.</i>	I	r	s <i>least</i>	y <i>in.</i>
10.35	122.0	3.43	22.3	4.53	6.3	.78	2.3	.76
9.77	115.9	3.44	21.2	4.52	5.8	.77	2.1	.74
9.14	110.4	3.48	20.3	4.56	5.6	.78	2.0	.72
8.55	104.3	3.49	19.2	4.56	5.1	.77	1.9	.70
7.90	98.2	3.53	18.3	4.62	4.8	.78	1.7	.69
7.32	92.1	3.55	17.2	4.63	4.4	.78	1.6	.68
8.95	86.3	3.11	17.2	4.00	5.8	.81	2.1	.76
8.41	81.8	3.12	16.4	3.98	5.4	.80	2.0	.74
7.82	77.6	3.15	15.6	4.03	5.1	.81	1.8	.73
7.29	73.1	3.17	14.8	4.03	4.7	.80	1.7	.71
6.68	68.4	3.20	13.9	4.10	4.3	.81	1.5	.70
6.14	63.8	3.22	13.1	4.10	3.9	.80	1.4	.68
7.86	60.0	2.77	13.2	4.6	5.5	.84	2.0	.78
7.37	56.7	2.77	12.5	3.44	5.1	.83	1.9	.76
6.83	53.7	2.81	11.0	3.49	4.8	.84	1.7	.75
6.34	50.4	2.82	11.2	3.48	4.4	.83	1.6	.73
5.78	47.1	2.85	10.6	3.54	4.0	.84	1.4	.71
5.29	43.8	2.88	9.8	35.4	3.7	.83	1.3	.70

THE PHOENIX IRON COMPANY

The Elements given are for the
minimum weight.

ELEMENTS OF BULB

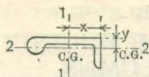
Section Number.	Size, in Inches.		Web Thickness, in Inches.	Weight per Foot, Pounds.
	Depth.	Flange.		
278	7	3½	.525	20.0
			.475	18.6
			.425	16.8
			.375	15.3
282	7	3	.500	18.4
			.450	16.9
			.400	15.3
			.350	13.9
277	6	3	.475	15.6
			.425	14.1
			.375	12.8
			.350	12.2
157	5	2½	.359	10.0 to 13.33
220	3½	2	.190	4.65
219	3	1½	.160	3.25
215	2½	1½	.150	2.66
216	2½	1 ⅞	.140	2.20
217	1½	1½	.130	1.63
218	1½	1	.120	1.27

ELEMENTS OF DECK

Section Number.	Size, in Inches.		Web Thickness, in Inches.	Weight per Foot, Pounds.
	Depth.	Flange.		
190	10	5½	⅞	31.33 to 36.66
145	9	5	⅞	23.33 " 28.00

THE PHOENIX IRON COMPANY

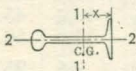
ANGLES



I = Moment of Inertia.
 s = Section Modulus.
 r = Radius of Gyration.

Area of Section. Sq. in.	Axis 1-1				Axis 2-2			
	I	r	s least	x in.	I	r	s least	y in.
5.90	35.5	2.45	8.8	2.95	4.5	.87	1.6	.77
5.46	33.2	2.47	8.2	2.94	4.1	.88	1.5	.75
4.94	30.9	2.50	7.7	3.00	3.7	.87	1.4	.74
4.50	28.6	2.52	7.2	2.99	3.4	.87	1.2	.72
5.41	32.5	2.45	8.3	3.09	2.7	.71	1.3	.65
4.98	30.3	2.46	7.8	3.08	2.5	.70	1.2	.63
4.50	28.1	2.50	7.3	3.14	2.3	.71	1.1	.61
4.07	25.9	2.52	6.7	3.14	2.0	.70	1.0	.60
4.58	20.2	2.10	5.9	2.55	2.5	.74	1.1	.67
4.14	18.8	2.13	5.5	2.60	2.3	.75	.96	.66
3.76	17.4	2.15	5.1	2.60	2.1	.74	.87	.64
3.58	16.6	2.16	4.9	2.59	1.9	.74	.83	.63
2.94	9.06	1.75	3.19	2.16	1.07	.60	.55	.56
1.37	2.29	1.29	1.16	1.53	.351	.506	.226	.45
.956	1.20	1.12	.70	1.29	.196	.453	.145	.395
.782	.685	.94	.50	1.12	.113	.380	.099	.357
.647	.400	.79	.34	.947	.071	.331	.071	.314
.479	.198	.643	.20	.761	.039	.285	.046	.271
.373	.113	.550	.134	.654	.024	.253	.032	.248

BEAMS



The Elements given are for the minimum weights.

Area of Section. Sq. in.	Axis 1-1				Axis 2-2		
	I	r	s least	x in.	I	r	s
9.21	122.14	3.64	21.88	4.42	5.72	.79	2.13
6.86	82.60	3.47	16.15	3.88	4.55	.81	1.82

THE PHOENIX IRON COMPANY

TABLE OF
DIMENSIONS OF PHOENIX STEEL
COLUMNS

The dimensions given in the following table are subject to such slight variations as are unavoidable in the manufacture of these shapes.

The weights given are those of the segments composing the columns, and from 2 to 5 per cent. must be added for weight of the rivet heads.

The working loads specified are computed as being one-fourth of the ultimate, or breaking loads, and as producing a strain, or pressure, in an axial direction on square-end columns, of not more than 12,000 lbs. per square inch for lengths of 90 radii and under.

The A, B1, B2, and C columns have each 4 segments, the E have 6, and the G have 8 segments.

Any desired thickness between the minimum and maximum can be furnished.

Least Radius of Gyration equals $D \times .3636$

One Segment.		Diameters, in Inches.			One Column.			Working Load, in Net Tons, for 16 Feet Lengths.
Thick-ness, in Ins.	Weight per Foot, in Pounds.	d Inside.	D Outside.	D1 Over Flanges.	Area of Cross Section. Sq. In.	Weight per Foot, in Pounds.	Least Radius of Gyration, in Inches.	
$\frac{3}{16}$	3.2	A	4	$6\frac{1}{16}$	3.8	12.9	1.45	18.1
$\frac{1}{4}$	4.1		$4\frac{1}{8}$	$6\frac{3}{16}$	4.8	16.3	1.50	23.5
$\frac{5}{16}$	4.9		$4\frac{1}{4}$	$6\frac{5}{16}$	5.8	19.7	1.55	29.1
$\frac{3}{8}$	5.8		$4\frac{3}{8}$	$6\frac{7}{16}$	6.8	23.1	1.59	34.7
$\frac{1}{4}$	5.4	B1	$5\frac{3}{8}$	$8\frac{1}{8}$	6.4	21.8	1.95	36.8
$\frac{5}{16}$	6.6		$5\frac{1}{2}$	$8\frac{3}{16}$	7.8	26.5	2.00	45.0
$\frac{3}{8}$	7.8		$5\frac{5}{8}$	$8\frac{5}{16}$	9.2	31.3	2.04	54.0
$\frac{7}{16}$	9.0		$5\frac{3}{4}$	$8\frac{7}{16}$	10.6	36.0	2.09	62.9
$\frac{1}{2}$	10.2		$5\frac{7}{8}$	$8\frac{1}{2}$	12.0	40.8	2.13	72.0
$\frac{9}{16}$	11.4		6	$8\frac{9}{16}$	13.4	45.6	2.18	80.4
$\frac{5}{8}$	12.6		$6\frac{1}{8}$	$8\frac{11}{16}$	14.8	50.3	2.23	88.8
$\frac{1}{4}$	6.3		B2	$6\frac{9}{16}$	$9\frac{1}{4}$	7.4	25.2	2.39	44.4
$\frac{5}{16}$	7.6	$6\frac{11}{16}$		$9\frac{3}{8}$	9.0	30.6	2.43	54.0
$\frac{3}{8}$	9.0	$6\frac{13}{16}$		$9\frac{7}{16}$	10.6	36.0	2.48	63.6
$\frac{7}{16}$	10.4	$6\frac{15}{16}$		$9\frac{1}{2}$	12.2	41.5	2.52	73.2
$\frac{1}{2}$	11.7	$7\frac{1}{16}$		$9\frac{5}{8}$	13.8	46.9	2.57	82.8
$\frac{9}{16}$	13.1	$7\frac{3}{16}$		$9\frac{3}{4}$	15.4	52.4	2.61	92.4
$\frac{5}{8}$	14.4	$7\frac{5}{16}$		$9\frac{13}{16}$	17.0	57.8	2.66	102.0

THE PHOENIX IRON COMPANY

DIMENSIONS OF PHOENIX STEEL COLUMNS—Continued

One Segment.		Diameters, in Inches.			One Column.			Working Load, in Net Tons for 16 Feet Lengths.
Thickness, in Inches.	Weight per Foot, in Pounds.	d Inside.	D Outside.	D1 Over Flanges.	Area of Cross Section, Sq. In.	Weight per Foot, in Pounds.	Least Radius of Gyration, in Inches.	
1 1 1/8 1 1/4	8.5	C 7 3/8	7 1/8	11 1/8	10.0	34.0	2.84	60.0
	10.3		7 1/8	11 1/8	12.1	41.3	2.88	72.6
	12.0		8 1/8	11 3/8	14.1	48.0	2.93	84.6
	13.7		8 1/8	11 3/8	16.0	54.6	2.97	96.0
	15.3		8 1/8	11 3/8	18.0	61.3	3.01	108.0
	17.0		12	12	20.0	68.0	3.06	119.4
	18.3		8 3/8	12 1/8	21.9	74.6	3.11	131.4
	20.7		8 1/2	12 1/8	24.3	82.6	3.16	145.8
	22.7		8 3/4	12 1/8	26.6	90.6	3.20	159.6
	24.3		8 7/8	12 1/8	28.6	97.3	3.24	171.6
	26.0		9 1/8	12 1/8	30.6	104.0	3.29	183.6
	29.7		9 3/8	12 3/8	34.9	118.6	3.34	208.8
	33.0		9 5/8	12 1/2	38.8	132.0	3.48	232.8
	36.3		9 7/8	13	42.7	145.3	3.57	256.2
	1 1 1/8 1 1/4		9.3	E 11 1/8	11 3/8	15 1/2	16.5	56.0	4.20	99.0
10.8		11 1/2	15 3/4		19.1	65.0	4.25	114.6
12.3		11 3/4	15 3/4		21.7	74.0	4.29	130.2
14.0		11 3/4	15 3/4		24.7	84.0	4.34	148.2
15.7		12 1/8	15 3/4		27.6	94.0	4.38	165.6
17.3		12 1/8	16 1/8		30.6	104.0	4.43	183.6
19.0		12 3/8	16 1/8		33.5	114.0	4.48	201.0
20.7		12 1/2	16 1/8		36.4	124.0	4.52	218.4
22.7		12 3/4	16 1/8		40.0	136.0	4.56	240.0
24.3		12 3/4	16 3/8		43.0	146.0	4.61	258.0
26.0		12 3/4	16 3/8		45.9	156.0	4.66	275.4
29.3		13 1/8	16 3/8		51.7	176.0	4.73	310.2
32.7		13 3/8	17 1/8		57.6	196.0	4.84	345.6
36.0		13 5/8	17 3/8		63.5	216.0	4.93	381.0
1 1 1/8 1 1/4 1 1/2		10.3	G 14 1/2		15 1/2	19 3/8	24.3	82.6	5.54	145.2
	12.0	19 1/8		28.2	96.0	5.59	168.6	
	13.7	15 3/4		19 3/8	32.1	109.3	5.64	192.0
	15.3	15 3/4		19 3/8	36.0	122.6	5.68	216.0
	17.0	15 3/4		19 3/8	40.0	136.0	5.73	239.4
	18.7	15 3/4		19 3/8	43.9	149.3	5.77	262.8
	20.3	16		20	47.8	162.6	5.82	286.2
	22.0	16 1/8		20 1/8	51.7	176.0	5.88	310.2
	23.7	16 1/8		20 1/8	55.7	189.3	5.91	333.6
	25.3	16 1/4		20 3/8	59.6	202.6	5.95	357.6
	28.7	16 3/8		20 3/8	67.4	229.3	6.04	404.4
	32.0	16 3/4		20 3/4	75.3	256.0	6.13	451.8
	35.3	17 1/8		21	83.1	282.6	6.27	498.6
	38.7	17 3/8		21 1/2	90.9	309.3	6.32	545.4

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR

I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	3" I, No. 222			4" I, No. 213				5" I, No. 214		
	5.7 lbs.	6.5 lbs.	7.5 lbs.	7.7 lbs.	8.5 lbs.	9.5 lbs.	10.5 lbs.	10.0 lbs.	12.25 lbs.	14.75 lbs.
4	4.41	4.78	5.18	8.0	8.5	9.0	9.5	12.9	14.5	16.2
5	3.53	3.83	4.14	6.4	6.8	7.2	7.6	10.3	11.6	12.9
6	2.94	3.19	3.45	5.3	5.6	6.0	6.4	8.6	9.7	10.8
7	2.52	2.73	2.96	4.5	4.8	5.1	5.4	7.4	8.3	9.2
8	2.21	2.39	2.59	4.0	4.2	4.5	4.8	6.4	7.3	8.1
9	1.9	2.13	2.30	3.5	3.8	4.0	4.2	5.7	6.5	7.2
10	.....	.....	.....	3.2	3.4	3.6	3.8	5.2	5.8	6.5
11	.....	.....	.....	2.9	3.1	3.3	3.5	4.7	5.3	5.9
12	.....	.....	.....	2.6	2.8	3.0	3.2	4.3	4.8	5.4
13	.....	.....	.....	.....	.....	.....	.....	4.0	4.5	5.0
14	.....	.....	.....	.....	.....	.....	.....	3.7	4.2	4.6
15	.....	.....	.....	.....	.....	.....	.....	3.4	3.9	4.3

Span in Feet.	6" I, No. 212			7' I, No. 211			8" I, No. 210			
	12.5 lbs.	14.75 lbs.	17.25 lbs.	15.3 lbs.	17.5 lbs.	20.0 lbs.	18.4 lbs.	20.5 lbs.	23.0 lbs.	25.5 lbs.
4	19.4	21.3	23.3	27.6	29.9	32.1	37.9	40.4	43.0	45.6
5	15.5	17.1	18.6	22.1	23.9	25.7	30.3	32.3	34.4	36.5
6	12.9	14.2	15.5	18.4	19.9	21.4	25.3	26.9	28.7	30.4
7	11.1	12.2	13.3	15.8	17.1	18.4	21.7	23.1	24.6	26.1
8	9.7	10.7	11.6	13.8	14.9	16.1	19.0	20.2	21.5	22.8
9	8.6	9.5	10.4	12.3	13.3	14.3	16.9	18.0	19.1	20.3
10	7.8	8.5	9.3	11.0	11.9	12.9	15.2	16.2	17.2	18.2
11	7.0	7.8	8.5	10.0	10.9	11.7	13.8	14.7	15.6	16.6
12	6.5	7.1	7.8	9.2	10.0	10.7	12.6	13.5	14.3	15.2
13	6.0	6.6	7.2	8.5	9.2	9.9	11.7	12.4	13.2	14.0
14	5.5	6.1	6.7	7.9	8.5	9.2	10.8	11.5	12.3	13.0
15	5.2	5.7	6.2	7.4	8.0	8.6	10.1	10.8	11.5	12.2
16	4.8	5.3	5.8	6.9	7.5	8.0	9.5	10.1	10.8	11.4
17	4.6	5.0	5.5	6.5	7.0	7.6	8.9	9.5	10.2	10.8
18	4.3	4.7	5.2	6.1	6.6	7.1	8.4	9.0	9.6	10.2
19	.....	.....	.....	5.8	6.3	6.8	8.0	8.5	9.1	9.6
20	.....	.....	.....	5.5	6.0	6.4	7.6	8.1	8.6	9.1
21	.....	.....	.....	5.3	5.7	6.1	7.2	7.7	8.2	8.7
22	.....	.....	.....	.....	.....	.....	6.9	7.4	7.8	8.3
23	.....	.....	.....	.....	.....	.....	6.6	7.1	7.5	8.0
24	.....	.....	.....	.....	.....	.....	6.3	6.8	7.2	7.6
25	.....	.....	.....	.....	.....	.....	6.1	6.5	6.9	7.3

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR

I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	9" I, No. 209				10" I, No. 221				12" I, No. 253*
	21.8 lbs.	25 lbs.	30 lbs.	35 lbs.	25.4 lbs.	30 lbs.	35 lbs.	40 lbs.	27.5 lbs.
6	33.6	36.3	40.2	44.2	43.4	47.7	52.1	56.4	59.1
7	28.8	31.1	34.5	37.9	37.2	40.9	44.6	48.4	50.7
8	25.2	27.2	30.2	33.1	32.6	35.8	39.0	42.3	44.4
9	22.4	24.2	26.8	29.4	28.9	31.8	34.7	37.6	39.4
10	20.1	21.8	24.2	26.5	26.0	28.6	31.2	33.8	35.5
11	18.3	19.8	22.0	24.1	23.7	26.0	28.4	30.8	32.3
12	16.8	18.2	20.1	22.1	21.7	23.8	26.0	28.2	29.6
13	15.5	16.8	18.6	20.4	20.0	22.0	24.0	26.0	27.3
14	14.4	15.6	17.2	18.9	18.6	20.4	22.3	24.2	25.3
15	13.4	14.5	16.1	17.7	17.4	19.1	20.8	22.6	23.7
16	12.6	13.6	15.1	16.6	16.3	17.9	19.5	21.2	22.2
17	11.8	12.8	14.2	15.6	15.3	16.8	18.4	19.9	20.9
18	11.2	12.1	13.4	14.7	14.5	15.9	17.4	18.8	19.7
19	10.6	11.5	12.7	14.0	13.7	15.1	16.4	17.8	18.7
20	10.1	10.9	12.1	13.3	13.0	14.3	15.6	16.9	17.7
21	9.6	10.4	11.5	12.6	12.4	13.6	14.9	16.1	16.9
22	9.2	9.9	11.0	12.1	11.8	13.0	14.2	15.4	16.1
23	8.8	9.5	10.5	11.5	11.3	12.4	13.6	14.7	15.4
24	8.4	9.1	10.1	11.0	10.8	11.9	13.0	14.1	14.8
25	8.0	8.7	9.7	10.6	10.4	11.4	12.5	13.5	14.2
26	7.7	8.4	9.3	10.2	10.0	11.0	12.0	13.0	13.6
27	7.5	8.1	8.9	9.8	9.6	10.6	11.6	12.5	13.1
28	7.2	7.8	8.6	9.5	9.3	10.2	11.2	12.1	12.6
29	6.9	7.5	8.3	9.1	9.0	9.9	10.8	11.7	12.2
30	6.7	7.3	8.0	8.8	8.7	9.5	10.4	11.3	11.8
31	.....	.....	.....	.....	8.4	9.2	10.1	10.9	11.5
32	.....	.....	.....	.....	8.1	8.9	9.8	10.6	11.1

*Special.

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR
I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	12" I, No. 166		12" I, No. 165				15" I, No. 252*
	31.8 lbs.	35 lbs.	40.8 lbs.	45 lbs.	50 lbs.	55 lbs.	
10	38.4	40.6	47.8	50.8	53.9	57.1	57.6
11	34.9	36.9	43.5	46.2	49.0	51.9	52.4
12	32.0	33.8	39.8	42.3	44.9	47.6	48.0
13	29.5	31.2	36.8	39.1	41.5	43.9	44.3
14	27.4	29.0	34.2	36.3	38.5	40.8	41.2
15	25.6	27.1	31.9	33.9	36.0	38.0	38.4
16	24.0	25.4	29.9	31.8	33.7	35.7	36.0
17	22.6	23.9	28.1	29.9	31.7	33.6	33.9
18	21.3	22.5	26.6	28.2	30.0	31.7	32.0
19	20.2	21.4	25.2	26.7	28.4	30.0	30.3
20	19.2	20.3	23.9	25.4	27.0	28.5	28.8
21	18.3	19.3	22.8	24.2	25.7	27.2	27.4
22	17.4	18.4	21.7	23.1	24.5	25.9	26.2
23	16.7	17.6	20.8	22.1	23.4	24.8	25.1
24	16.0	16.9	19.9	21.2	22.5	23.8	24.0
25	15.4	16.2	19.1	20.3	21.6	22.8	23.0
26	14.8	15.6	18.4	19.5	20.7	22.0	22.2
27	14.2	15.0	17.7	18.8	20.0	21.1	21.3
28	13.7	14.5	17.1	18.1	19.3	20.4	20.6
29	13.2	14.0	16.5	17.5	18.6	19.7	19.9
30	12.8	13.5	15.9	16.9	18.0	19.0	19.2
31	12.4	13.1	15.4	16.4	17.4	18.4	18.6
32	12.0	12.7	14.9	15.9	16.8	17.8	18.0
33	11.6	12.3	14.5	15.4	16.3	17.3	17.5
34	11.3	11.9	14.1	14.9	15.9	16.8	16.9
35	11.0	11.6	13.7	14.5	15.4	16.3	16.5
36	10.7	11.3	13.3	14.1	15.0	15.8	16.0

*Special.

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR
I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	15" I, No. 164				15" I, No. 162			
	42.9 lbs.	45 lbs.	50 lbs.	55 lbs.	60.8 lbs.	65 lbs.	70 lbs.	75 lbs.
10	62.8	64.8	68.8	72.7	86.6	90.5	94.4	98.3
11	57.1	58.9	62.5	66.1	78.7	82.2	85.8	89.4
12	52.4	54.0	57.3	60.6	72.2	75.4	78.7	81.9
13	48.3	49.9	52.9	55.9	66.6	69.6	72.6	75.6
14	44.9	46.3	49.1	51.9	61.9	64.6	67.4	70.2
15	41.9	43.2	45.8	48.5	57.7	60.3	62.9	65.5
16	39.3	40.5	43.0	45.4	54.1	56.5	59.0	61.4
17	37.0	38.1	40.4	42.8	51.0	53.2	55.5	57.8
18	34.9	36.0	38.2	40.4	48.1	50.3	52.4	54.6
19	33.1	34.1	36.2	38.3	45.6	47.6	49.7	51.7
20	31.4	32.4	34.4	36.3	43.3	45.2	47.2	49.2
21	29.9	30.9	32.7	34.6	41.2	43.1	45.0	46.8
22	28.6	29.5	31.3	33.0	39.4	41.1	42.9	44.7
23	27.3	28.2	29.9	31.6	37.7	39.3	41.0	42.7
24	26.2	27.0	28.6	30.3	36.1	37.7	39.3	41.0
25	25.1	25.9	27.5	29.1	34.6	36.2	37.8	39.3
26	24.2	24.9	26.4	28.0	33.3	34.8	36.3	37.8
27	23.3	24.0	25.5	26.9	32.1	33.5	35.0	36.4
28	22.4	23.2	24.6	26.0	30.9	32.3	33.7	35.1
29	21.7	22.4	23.7	25.1	29.9	31.2	32.6	33.9
30	20.9	21.6	22.9	24.2	28.9	30.2	31.5	32.8
31	20.3	20.9	22.2	23.4	27.9	29.2	30.4	31.7
32	19.6	20.3	21.5	22.7	27.1	28.3	29.5	30.7
33	19.0	19.6	20.8	22.0	26.2	27.4	28.6	29.8
34	18.5	19.1	20.2	21.4	25.5	26.6	27.8	28.9
35	18.0	18.5	19.6	20.8	24.8	25.8	27.0	28.1
36	17.4	18.0	19.1	20.2	24.1	25.1	26.2	27.3

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR

I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	15" I, No. 161				18" I, No. 207			
	81.3 lbs.	85 lbs.	90 lbs.	95 lbs.	54.7 lbs.	60 lbs.	65 lbs.	70 lbs.
10	112.2	116.0	120.0	123.9	94.3	99.8	104.5	109.2
11	102.0	105.5	109.0	112.6	85.7	90.7	95.0	99.3
12	93.5	96.7	100.0	103.2	78.6	83.1	87.1	91.0
13	86.3	89.3	92.3	95.3	72.5	76.7	80.4	84.0
14	80.2	82.9	85.7	88.5	67.4	71.3	74.6	78.0
15	74.8	77.4	80.0	82.6	62.9	66.5	69.6	72.8
16	70.1	72.5	75.0	77.4	58.9	62.4	65.3	68.2
17	66.0	68.3	70.6	72.9	55.5	58.7	61.5	64.2
18	62.4	64.5	66.6	68.8	52.4	55.4	58.0	60.7
19	59.1	61.1	63.1	65.2	49.6	52.5	55.0	57.5
20	56.1	58.0	60.0	61.9	47.1	49.9	52.2	54.6
21	53.4	55.2	57.1	59.0	44.9	47.5	49.8	52.0
22	51.0	52.7	54.5	56.3	42.9	45.4	47.5	49.6
23	48.8	50.4	52.2	53.9	41.0	43.4	45.4	47.5
24	46.8	48.4	50.0	51.6	39.3	41.6	43.5	45.5
25	44.9	46.4	48.0	49.6	37.7	39.9	41.8	43.7
26	43.2	44.6	46.1	47.6	36.3	38.4	40.2	42.0
27	41.6	43.0	44.4	45.9	34.9	37.0	38.7	40.4
28	40.1	41.4	42.8	44.2	33.7	35.6	37.3	39.0
29	38.7	40.0	41.4	42.7	32.5	34.4	36.0	37.6
30	37.4	38.7	40.0	41.3	31.4	33.3	34.8	36.4
31	36.2	37.4	38.7	40.0	30.4	32.2	33.7	35.2
32	35.1	36.3	37.5	38.7	29.5	31.2	32.6	34.1
33	34.0	35.2	36.4	37.5	28.6	30.2	31.7	33.1
34	33.0	34.1	35.3	36.4	27.7	29.3	30.7	32.1
35	32.1	33.2	34.3	35.4	26.9	28.5	29.8	31.2
36	31.2	32.2	33.3	34.4	26.2	27.7	29.0	30.3

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR

I-BEAMS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	20" I, No. 206			20" I, No. 208				
	65.4 lbs.	70 lbs.	75 lbs.	81.4 lbs.	85 lbs.	90 lbs.	95 lbs.	100 lbs.
10	124.8	130.1	135.3	156.4	160.9	166.1	171.4	176.6
11	113.4	118.3	123.0	142.2	146.3	151.0	155.8	160.5
12	104.0	108.4	112.8	130.3	134.1	138.5	142.8	147.2
13	96.0	100.1	104.1	120.3	123.8	127.8	131.8	135.8
14	89.1	92.9	96.7	111.7	114.9	118.7	122.4	126.1
15	83.2	86.7	90.2	104.3	107.3	110.8	114.2	117.7
16	78.0	81.3	84.6	97.8	100.6	103.8	107.1	110.4
17	73.4	76.5	79.6	92.0	94.6	97.7	100.8	103.9
18	69.3	72.3	75.2	86.9	89.4	92.3	95.2	98.1
19	65.7	68.5	71.2	82.3	84.7	87.4	90.2	93.0
20	62.4	65.1	67.7	78.2	80.5	83.1	85.7	88.3
21	59.4	62.0	64.4	74.5	76.6	79.1	81.6	84.1
22	56.7	59.1	61.5	71.1	73.1	75.5	77.9	80.3
23	54.2	56.6	58.8	68.0	70.0	72.2	74.5	76.8
24	52.0	54.2	56.4	65.2	67.0	69.2	71.4	73.6
25	49.9	52.0	54.1	62.6	64.4	66.5	68.6	70.6
26	48.0	50.0	52.1	60.2	61.9	63.9	65.9	67.9
27	46.2	48.2	50.1	57.9	59.6	61.5	63.5	65.4
28	44.6	46.5	48.3	55.9	57.5	59.3	61.2	63.1
29	43.0	44.9	46.7	53.9	55.5	57.3	59.1	60.9
30	41.6	43.4	45.1	52.1	53.6	55.4	57.1	58.9
31	40.2	42.0	43.7	50.5	51.9	53.6	55.3	57.0
32	39.0	40.7	42.3	48.9	50.3	51.9	53.6	55.2
33	37.8	39.4	41.0	47.4	48.8	50.4	51.9	53.5
34	36.7	38.3	39.8	46.0	47.3	48.9	50.4	51.9
35	35.6	37.2	38.7	44.7	46.0	47.5	49.0	50.5
36	34.7	36.1	37.6	43.4	44.7	46.2	47.6	49.1
37	33.7	35.2	36.6	42.3	43.5	44.9	46.3	47.7
38	32.8	34.2	35.6	41.2	42.3	43.7	45.1	46.5
39	32.0	33.4	34.7	40.1	41.3	42.6	43.9	45.3
40	31.2	32.5	33.8	39.1	40.2	41.5	42.8	44.1
41	30.4	31.7	33.0	38.1	39.2	40.5	41.8	43.1
42	29.7	31.0	32.2	37.2	38.3	39.6	40.8	42.0

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR CHANNELS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	3" C, No. 116			4" C, No. 118			5" C, No. 120		
	4.1 lbs.	5.0 lbs.	6.0 lbs.	5.4 lbs.	6.25 lbs.	7.25 lbs.	6.7 lbs.	9.0 lbs.	11.5 lbs.
4	2.91	3.29	3.68	5.06	5.57	6.09	7.91	9.46	11.10
5	2.33	2.63	2.94	4.05	4.45	4.87	6.33	7.57	8.88
6	1.94	2.19	2.45	3.37	3.71	4.06	5.27	6.31	7.40
7	1.66	1.88	2.10	2.89	3.18	3.48	4.52	5.41	6.34
8	1.45	1.64	1.84	2.53	2.78	3.05	3.96	4.73	5.55
9	1.29	1.46	1.63	2.25	2.47	2.51	3.52	4.21	4.93
10	.....	.....	.....	2.02	2.23	2.44	3.16	3.79	4.44
11	.....	.....	.....	1.84	2.02	2.21	2.88	3.44	4.04
12	.....	.....	.....	1.69	1.86	2.03	2.64	3.15	3.70
13	.....	.....	.....	.....	.....	.....	2.43	2.91	3.41
14	.....	.....	.....	.....	.....	.....	2.26	2.70	3.17
15	.....	.....	.....	.....	.....	.....	2.11	2.52	2.96

Span in Feet.	6" C, No. 144				7" C, No. 136				
	8.2 lbs.	10.5 lbs.	13.0 lbs.	15.5 lbs.	9.8 lbs.	12.25 lbs.	14.75 lbs.	17.25 lbs.	19.75 lbs.
4	11.6	13.4	15.4	17.4	16.1	18.4	20.7	23.0	25.3
5	9.2	10.8	12.3	13.9	12.9	14.7	16.6	18.4	20.2
6	7.7	9.0	10.3	11.6	10.7	12.3	13.8	15.3	16.9
7	6.6	7.7	8.8	9.9	9.2	10.5	11.8	13.1	14.4
8	5.8	6.7	7.7	8.7	8.0	9.2	10.4	11.5	12.6
9	5.1	6.0	6.8	7.7	7.1	8.2	9.2	10.2	11.2
10	4.6	5.4	6.2	6.9	6.4	7.4	8.3	9.2	10.1
11	4.2	4.9	5.6	6.3	5.8	6.7	7.5	8.4	9.2
12	3.9	4.5	5.1	5.8	5.4	6.1	6.9	7.7	8.4
13	3.6	4.1	4.7	5.3	4.9	5.7	6.4	7.1	7.8
14	3.3	3.8	4.4	5.0	4.6	5.3	5.9	6.6	7.2
15	3.1	3.6	4.1	4.6	4.3	4.9	5.5	6.1	6.7
16	2.9	3.4	3.8	4.3	4.0	4.6	5.2	5.8	6.3
17	2.7	3.2	3.6	4.1	3.8	4.3	4.9	5.4	6.0
18	2.6	3.0	3.4	3.9	3.6	4.1	4.6	5.1	5.6
19	.....	.....	.....	.....	3.4	3.9	4.4	4.8	5.3
20	.....	.....	.....	.....	3.2	3.7	4.1	4.6	5.1
21	.....	.....	.....	.....	3.1	3.5	3.9	4.4	4.8

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR CHANNELS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	8" C, No. 122					9" C, No. 233			
	11.5 lbs.	13.75 lbs.	16.25 lbs.	18.75 lbs.	21.25 lbs.	13.4 lbs.	15 lbs.	20 lbs.	25 lbs.
4	21.5	24.0	26.6	29.2	31.8	28.0	30.1	36.0	41.9
5	17.2	19.2	21.3	23.4	25.5	22.4	24.1	28.8	33.5
6	14.4	16.0	17.7	19.5	21.2	18.7	20.1	24.0	27.9
7	12.3	13.7	15.2	16.7	18.2	16.0	17.2	20.6	23.9
8	10.8	12.0	13.3	14.6	15.9	14.0	15.1	18.0	21.0
9	9.6	10.7	11.8	13.0	14.2	12.5	13.4	16.0	18.6
10	8.6	9.6	10.6	11.7	12.7	11.2	12.1	14.4	16.8
11	7.8	8.7	9.7	10.6	11.6	10.2	11.0	13.1	15.2
12	7.2	8.0	8.9	9.7	10.6	9.4	10.1	12.0	14.0
13	6.6	7.4	8.2	9.0	9.8	8.6	9.3	11.1	12.9
14	6.2	6.9	7.6	8.4	9.1	8.0	8.6	10.3	12.0
15	5.7	6.4	7.1	7.8	8.5	7.5	8.0	9.6	11.2
16	5.4	6.0	6.7	7.3	8.0	7.0	7.5	9.0	10.5
17	5.1	5.6	6.3	6.9	7.5	6.6	7.1	8.5	9.9
18	4.8	5.3	5.9	6.5	7.1	6.2	6.7	8.0	9.3
19	4.5	5.0	5.6	6.2	6.7	5.9	6.3	7.6	8.8
20	4.3	4.8	5.3	5.9	6.4	5.6	6.0	7.2	8.4
21	4.1	4.6	5.1	5.6	6.1	5.3	5.7	6.9	8.0
22	3.9	4.4	4.8	5.3	5.8	5.1	5.5	6.6	7.6
23	3.8	4.2	4.6	5.1	5.5	4.9	5.2	6.3	7.3
24	3.6	4.0	4.4	4.9	5.3	4.7	5.0	6.0	7.0
25	.....	.....	.....	.....	.....	4.5	4.8	5.8	6.7
26	.....	.....	.....	.....	.....	4.3	4.6	5.5	6.4
27	.....	.....	.....	.....	.....	4.2	4.4	5.3	6.2

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR
CHANNELS

In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	10" C, No. 130					12" C, No. 141		
	15.3 lbs.	20 lbs.	25 lbs.	30 lbs.	35 lbs.	20.7 lbs.	25 lbs.	30 lbs.
4	35.7	42.0	48.5	55.1	61.6	56.9	64.0	71.8
5	28.5	33.6	38.8	44.0	49.3	45.5	51.2	57.5
6	23.8	28.0	32.3	36.7	41.1	38.0	42.7	47.9
7	20.4	24.0	27.7	31.5	35.2	32.5	36.6	41.1
8	17.8	21.0	24.3	27.5	30.8	28.5	32.0	35.9
9	15.9	18.7	21.6	24.5	27.4	25.3	28.4	31.9
10	14.3	16.8	19.4	22.0	24.6	22.8	25.6	28.7
11	13.0	15.3	17.6	20.0	22.4	20.7	23.3	26.1
12	11.9	14.0	16.2	18.4	20.5	19.0	21.3	24.0
13	11.0	12.9	14.9	16.9	19.0	17.5	19.7	22.1
14	10.2	12.0	13.9	15.7	17.6	16.3	18.3	20.5
15	9.5	11.2	12.9	14.7	16.4	15.2	17.1	19.2
16	8.9	10.5	12.1	13.8	15.4	14.2	16.0	18.0
17	8.4	9.9	11.4	13.0	14.5	13.4	15.1	16.9
18	7.9	9.3	10.8	12.2	13.7	12.7	14.2	16.0
19	7.5	8.8	10.2	11.6	13.0	12.0	13.5	15.1
20	7.1	8.4	9.7	11.0	12.3	11.4	12.8	14.4
21	6.8	8.0	9.2	10.5	11.7	10.8	12.2	13.7
22	6.5	7.6	8.8	10.0	11.2	10.4	11.6	13.1
23	6.2	7.3	8.4	9.6	10.7	9.9	11.1	12.5
24	5.9	7.0	8.1	9.2	10.3	9.5	10.7	12.0
25	5.7	6.7	7.8	8.8	9.9	9.1	10.2	11.5
26	5.5	6.5	7.5	8.5	9.5	8.8	9.8	11.1
27	5.3	6.2	7.2	8.2	9.1	8.4	9.5	10.6
28	5.1	6.0	6.9	7.9	8.8	8.1	9.1	10.3
29	4.9	5.8	6.7	7.6	8.5	7.8	8.8	9.9
30	4.8	5.6	6.5	7.3	8.2	7.6	8.5	9.6

THE PHOENIX IRON COMPANY

WORKING LOADS, UNIFORMLY DISTRIBUTED, FOR
CHANNELS

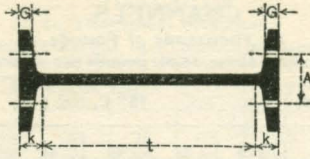
In Thousands of Pounds

Maximum fibre stress, 16,000 pounds per square inch.

Span in Feet.	12" C, No. 141		15" C, No. 140					
	35 lbs.	40 lbs.	33.9 lbs.	35 lbs.	40 lbs.	45 lbs.	50 lbs.	55 lbs.
6	53.1	58.4	74.1	75.8	82.4	88.9	95.4	102.0
7	45.5	50.0	63.5	65.0	70.6	76.2	81.8	87.4
8	39.8	43.8	55.6	56.9	61.8	66.7	71.6	76.5
9	35.4	38.9	49.4	50.6	54.9	59.3	63.6	68.0
10	31.9	35.0	44.5	45.5	49.4	53.4	57.3	61.2
11	29.0	31.8	40.4	41.4	44.9	48.5	52.1	55.6
12	26.6	29.2	37.0	37.9	41.2	44.5	47.7	51.0
13	24.5	26.9	34.2	35.0	38.0	41.0	44.1	47.1
14	22.8	25.0	31.8	32.5	35.3	38.1	40.9	43.7
15	21.2	23.3	29.6	30.3	33.0	35.6	38.2	40.8
16	19.9	21.9	27.8	28.4	30.9	33.3	35.8	38.2
17	18.8	20.6	26.2	26.8	29.1	31.4	33.7	36.0
18	17.7	19.5	24.7	25.3	27.5	29.6	31.8	34.0
19	16.8	18.4	23.4	24.0	26.0	28.1	30.1	32.2
20	15.9	17.5	22.2	22.8	24.7	26.7	28.6	30.6
21	15.2	16.7	21.2	21.7	23.5	25.4	27.3	29.1
22	14.5	15.9	20.2	20.7	22.5	24.3	26.0	27.8
23	13.9	15.2	19.3	19.8	21.5	23.2	24.9	26.6
24	13.3	14.6	18.5	19.0	20.6	22.2	23.9	25.5
25	12.8	14.0	17.8	18.2	19.8	21.3	22.9	24.5
26	12.3	13.5	17.1	17.5	19.0	20.5	22.0	23.5
27	11.8	13.0	16.5	16.9	18.3	19.8	21.2	22.7
28	11.4	12.5	15.9	16.3	17.7	19.1	20.5	21.9
29	11.0	12.1	15.3	15.7	17.0	18.4	19.8	21.1
30	10.6	11.7	14.8	15.2	16.5	17.8	19.1	20.4
31	10.3	11.3	14.3	14.7	15.9	17.2	18.5	19.7
32	10.0	10.9	13.9	14.2	15.4	16.7	17.9	19.1

THE PHOENIX IRON COMPANY

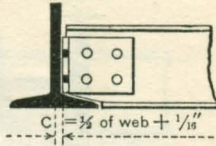
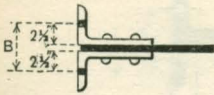
PHOENIX STANDARDS



Depth of Beam. Inches.	Weight per Foot, Pounds.	Flange, Inches.	Web, Inches.	Gauge A, Inches.	Tangent t, Inches.	Distance k, Inches.	Grip G, Inches.	Max. Rivet or Bolt, Inches.	Wall Bearing, Inches.	Wall Plates.
24	100.0	7 $\frac{1}{4}$	1 $\frac{3}{4}$	4	20 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7	16	16" x 1" x 16" 73 lbs.
	95.0	7 $\frac{3}{16}$	1 $\frac{1}{2}$	4	20 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7		
	90.0	7 $\frac{1}{8}$	1 $\frac{1}{2}$	4	20 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7		
	85.0	7 $\frac{1}{16}$	1 $\frac{1}{2}$	4	20 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7		
	79.9	7	1 $\frac{1}{2}$	4	20 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7		
20	100.0	7 $\frac{3}{8}$	1 $\frac{3}{4}$	4	16 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	7	16	16" x 1" x 16" 73 lbs.
	95.0	6 $\frac{3}{8}$	1 $\frac{3}{4}$	4	16 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	7		
	90.0	6 $\frac{5}{16}$	1 $\frac{3}{4}$	4	16 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	7		
	85.0	6 $\frac{7}{16}$	1 $\frac{3}{4}$	4	16 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	7		
	81.4	6 $\frac{1}{2}$	1 $\frac{3}{4}$	4	16 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	7		
	75.0	6 $\frac{1}{4}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	17	1 $\frac{1}{2}$	3 $\frac{1}{2}$	7		
	70.0	6 $\frac{1}{4}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	17	1 $\frac{1}{2}$	3 $\frac{1}{2}$	7		
65.4	6 $\frac{1}{4}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	17	1 $\frac{1}{2}$	3 $\frac{1}{2}$	7			
18	70.0	6 $\frac{1}{4}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	15 $\frac{1}{4}$	1 $\frac{3}{8}$	3 $\frac{1}{2}$	7	16	16" x 1" x 16" 73 lbs.
	65.0	6 $\frac{1}{8}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	15 $\frac{1}{4}$	1 $\frac{3}{8}$	3 $\frac{1}{2}$	7		
	60.0	6 $\frac{3}{32}$	1 $\frac{3}{4}$	3 $\frac{1}{2}$	15 $\frac{1}{4}$	1 $\frac{3}{8}$	3 $\frac{1}{2}$	7		
	54.7	6	1 $\frac{3}{4}$	3 $\frac{1}{2}$	15 $\frac{1}{4}$	1 $\frac{3}{8}$	3 $\frac{1}{2}$	7		
	100.0	6 $\frac{5}{16}$	1 $\frac{3}{4}$	3 $\frac{3}{4}$	11	2	3 $\frac{1}{2}$	7			12	12" x 1" x 16" 41 lbs.
95.0	6 $\frac{1}{2}$	1 $\frac{3}{4}$	3 $\frac{3}{4}$	11	2	3 $\frac{1}{2}$	7			
90.0	6 $\frac{1}{4}$	1	3 $\frac{3}{4}$	11	2	3 $\frac{1}{2}$	7			
85.0	6 $\frac{3}{8}$	1	3 $\frac{3}{4}$	11	2	3 $\frac{1}{2}$	7			
81.3	6 $\frac{1}{4}$	1	3 $\frac{3}{4}$	11	2	3 $\frac{1}{2}$	7			
75.0	6 $\frac{1}{8}$	1 $\frac{1}{4}$	3 $\frac{1}{4}$	11 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7			
70.0	6 $\frac{3}{16}$	1 $\frac{1}{4}$	3 $\frac{1}{4}$	11 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7			
65.0	6 $\frac{3}{32}$	1 $\frac{1}{4}$	3 $\frac{1}{4}$	11 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7			
60.8	6	1 $\frac{1}{4}$	3 $\frac{1}{4}$	11 $\frac{3}{4}$	1 $\frac{5}{8}$	3 $\frac{1}{2}$	7			
55.0	5 $\frac{3}{4}$	1 $\frac{1}{4}$	3	12 $\frac{1}{2}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	7			
50.0	5 $\frac{1}{2}$	1 $\frac{1}{4}$	3	12 $\frac{1}{2}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	7			
45.0	5 $\frac{9}{16}$	1 $\frac{1}{4}$	3	12 $\frac{1}{2}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	7			
42.9	5 $\frac{1}{2}$	1 $\frac{1}{4}$	3	12 $\frac{1}{2}$	1 $\frac{1}{4}$	3 $\frac{1}{2}$	7			
36.0	5 $\frac{1}{2}$	1 $\frac{1}{4}$	3	12	1 $\frac{3}{16}$	3 $\frac{1}{2}$	7			

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PHOENIX STANDARDS

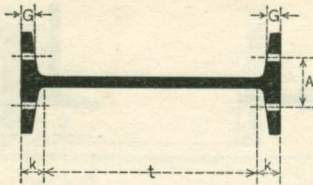


STANDARD FRAMING.

	Dist. B. Inches.	Dist. C. Inches.	Weight per Foot. Pounds.	Depth of Beam. Inches.
<p>24" 4" x 4" x 1/2" Angle 1' 5 1/2" long Wt. 45 lbs.</p>	5 3/4	7 1/8	100.0	24
	5 1/4	7 1/8	95.0	
	5 1/8	7 1/8	90.0	
	5 1/2	7 1/8	85.0	
	5 1/4	7 1/8	79.9	
<p>20" 4" x 4" x 7/16" Angle 1' 1 1/2" long Wt. 27 lbs.</p>	5 7/8	100.0	20	
	5 1/2	95.0		
	5 1/4	90.0		
	5 1/2	85.0		
	5 1/4	81.4		
<p>18" 4" x 4" x 7/16" Angle 1' 1 1/2" long Wt. 27 lbs.</p>	5 1/2	100.0	18	
	5 1/4	95.0		
	5 1/2	90.0		
	5 1/4	85.0		
	5 1/2	81.3		
<p>15" 4" x 4" x 7/16" Angle 1' 1 1/2" long Wt. 27 lbs.</p>	5 1/2	100.0	15	
	5 1/4	95.0		
	5 1/2	90.0		
	5 1/4	85.0		
	5 1/2	81.3		

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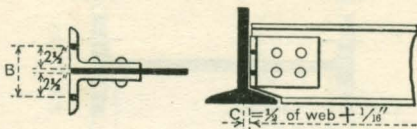
PHOENIX STANDARDS



Depth of Beam. Inches.	Weight per Foot. Pounds.	Flange. Inches.	Web. Inches.	Gauge A. Inches.	Tangent t. Inches.	Distance k. Inches	Grip G. Inches.	Max. Rivet or Bolt. Inches.	Wall Bearing. Inches.	Wall Plate.
12	55.0	5 5/8	1 3/8	3	9 1/4	1 1/8	8	4	12	12" x 3" x 12" 31 lbs.
	50.0	5 1/2	1 3/8	3	9 1/4	1 1/8	8	4		
	45.0	5 3/8	1 3/8	3	9 1/4	1 1/8	8	4		
	40.8	5 1/4	1 3/8	3	9 1/4	1 1/8	8	4		
	35.0	5 3/8	1 3/8	2 3/4	9 3/4	1 1/8	8	4		
	31.8	5	1 3/8	2 3/4	9 3/4	1 1/8	8	4		
27.5	5	1 3/8	2 3/4	9 3/4	1 1/8	8	4			
10	40.0	5 3/8	3 4	2 1/2	8	1	1 1/2	4	8	8" x 4" x 12" 17 lbs.
	35.0	4 9/16	3 5/16	2 1/2	8	1	1 1/2	4		
	30.0	4 1 1/8	3 5/16	2 1/2	8	1	1 1/2	4		
	25.4	4 2 1/8	3 5/16	2 1/2	8	1	1 1/2	4		
9	35.0	4 2 5/8	3 4	2 1/2	7	1	7/16	4	8	8" x 4" x 8" 12 lbs.
	30.0	4 3/8	3 7/16	2 1/2	7	1	7/16	4		
	25.0	4 3/8	3 7/16	2 1/2	7	1	7/16	4		
	21.8	4 2 1/8	3 7/16	2 1/2	7	1	7/16	4		
8	25.5	4 1 7/16	1 7/16	2 1/4	6 1/4	7/8	7/16	4	8	8" x 4" x 8" 12 lbs.
	23.0	4 3/16	1 7/16	2 1/4	6 1/4	7/8	7/16	4		
	20.5	4 3/8	1 7/16	2 1/4	6 1/4	7/8	7/16	4		
	18.4	4	1 7/16	2 1/4	6 1/4	7/8	7/16	4		
7	20.0	3 7/8	1 5/8	2 1/4	5 1/4	7/8	3/8	4	8	8" x 4" x 8" 12 lbs.
	17.5	3 5/8	1 5/8	2 1/4	5 1/4	7/8	3/8	4		
	15.3	3 3/8	1 4	2 1/4	5 1/4	7/8	3/8	4		
6	17.25	3 3/4	1 5/8	2	4 1/2	3/4	3/8	4	6	6" x 4" x 6" 5 lbs.
	14.75	3 2 3/4	1 5/8	2	4 1/2	3/4	3/8	4		
	12.50	3 2 1/4	1 5/8	2	4 1/2	3/4	3/8	4		
5	14.75	3 1 5/8	1 1/2	1 5/8	3 1/2	3/4	5/16	4	6	6" x 4" x 6" 5 lbs.
	12.25	3 9/8	1 1/2	1 5/8	3 1/2	3/4	5/16	4		
	10.00	3	1 1/2	1 5/8	3 1/2	3/4	5/16	4		

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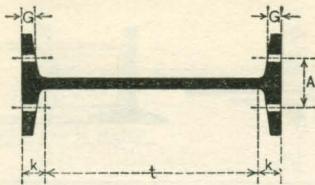
PHOENIX STANDARDS



STANDARD FRAMING.		Dist. B. Inches.	Dist. C. Inches.	Weight per Foot. Pounds.	Depth of Beam. Inches.
12"	<p>2 Angles 4" x 4" x 7/16" x 0'-8 1/2" Wt. 20 lbs.</p>	5 13/16	1 1/2	55.0	12
		5 1 1/8	1 7/16	50.0	
		5 1 5/16	3 3/8	45.0	
		5 3/2	5 5/8	40.8	
		5 5 7/8	7 5/8	35.0	
		5 3 3/8	1 1/4	31.8	
		5 1 1/4	1 5/8	27.5	
		5 3/4	7 7/8	40.0	
		5 5 3/8	3 3/8	35.0	
		5 3 1/2	5 5/8	30.0	
8" 9" and 10"	<p>2 Angles 6" x 4" x 3/8" x 0'-5 1/2" Wt. 15 lbs.</p>	5 1 5/8	1 1/4	25.4	8
		5 3/4	7 7/8	35.0	
		5 1 5/8	3 3/8	30.0	
		5 7 1/8	5 5/8	25.0	
		5 1 5/8	1 1/4	21.8	
		5 9 1/8	3 3/8	25.5	
		5 7 7/8	5 5/8	23.0	
		5 3 3/8	1 1/4	20.5	
		5 1 5/8	1 5/8	18.4	
		5 1 1/2	5 5/8	20.0	
5" 6" and 7"	<p>2 Angles 6" x 4" x 3/8" x 0'-3" Wt. 8 lbs.</p>	5 3/8	1 1/4	17.5	6
		5 1 1/4	3 3/8	15.3	
		5 1 1/2	5 5/8	17.25	
		5 3 3/8	1 1/4	14.75	
		5 1 1/4	1 3/8	12.50	
		5 1 1/2	5 5/8	14.75	
		5 3 3/8	1 1/4	12.25	
		5 1 1/2	1 3/8	10.00	

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Depth of Beam. Inches.	Weight per Foot. Pounds.	Flange. Inches.	Web. Inches.	Gauge A. Inches.	Tangent t. Inches.	Distance k. Inches.	Grip G. Inches.	Max. Rivet or Bolt. Inches.	Wall Bearing. Inches.	Wall Plates.
4	10.5	27 ⁰⁸ / ₃₂	13 ³¹ / ₃₂	1 1 ¹ / ₂	23 ⁴ / ₄	5 ⁵ / ₈	3 ⁹ / ₃₂	1 ¹ / ₂	6	6" x 1/2" x 6" 5 lbs.
	9.5	21 ¹³ / ₁₆	11 ¹¹ / ₃₂	1 1 ¹ / ₂	23 ³ / ₄	5 ⁵ / ₈	3 ⁹ / ₃₂	1 ¹ / ₂		
	8.5	24 ⁷ / ₁₆	17 ¹⁷ / ₆₄	1 1 ¹ / ₂	23 ⁴ / ₄	5 ⁵ / ₈	3 ⁹ / ₃₂	1 ¹ / ₂		
	7.7	22 ³¹ / ₃₂	13 ¹³ / ₁₆	1 1 ¹ / ₂	23 ³ / ₄	5 ⁵ / ₈	3 ⁹ / ₃₂	1 ¹ / ₂		
3	7.5	23 ³³ / ₆₄	23 ⁶⁴ / ₆₄	1 7 ⁷ / ₁₆	13 ⁴ / ₄	5 ⁵ / ₈	1 1 ⁴ / ₄	1 ¹ / ₂	6	6" x 1/2" x 6" 5 lbs.
	6.5	22 ²⁷ / ₆₄	17 ¹⁷ / ₆₄	1 7 ⁷ / ₁₆	13 ⁴ / ₄	5 ⁵ / ₈	1 1 ⁴ / ₄	1 ¹ / ₂		
	5.7	22 ²¹ / ₆₄	11 ¹¹ / ₆₄	1 7 ⁷ / ₁₆	13 ⁴ / ₄	5 ⁵ / ₈	1 1 ⁴ / ₄	1 ¹ / ₂		

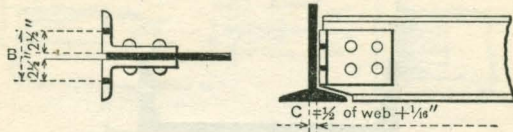
When beams frame opposite each other into another beam with web thickness less than 1/8 in., or where beams of short span length are loaded to their full capacity, it may be necessary to use framing angles of greater strength than the standards.

TABLE OF MINIMUM SPAN LENGTHS, in feet, which, with full working load, uniformly distributed, will not overstrain the standard connection; based on single shear value of field rivets or, if less, the value of shop rivets.

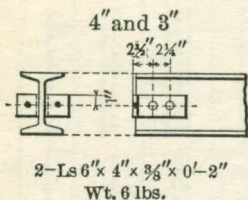
Size. . . .	24" I 79.9	20" I 81.4	20" I 65.4	18" I 54.7	15" I 81.3
Span. . . .	17.5	22.1	17.6	13.3	15.9
Size. . . .	15" I 60.8	15" I 42.9	15" I 36.0	12" I 40.8	12" I 31.8
Span. . . .	12.3	8.9	11.1	9.0	8.1
Size. . . .	12" I 27.5	10" I 25.4	9" I 21.8	8" I 18.4	7" I 15.3
Span. . . .	10.3	7.4	5.7	4.3	6.2

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PHOENIX STANDARDS



STANDARD FRAMING.



Dist. B. Inches.	Dist. C. Inches.	Weight per Foot. Pounds.	Depth of Beam. Inches.
5 7/16	5/16	10.5	4
5 3/8	1/4	9.5	
5 1/4	3/16	8.5	
5 3/16	3/16	7.7	
5 3/8	1/4	7.5	3
5 1/4	3/16	6.5	
5 3/16	3/16	5.7	

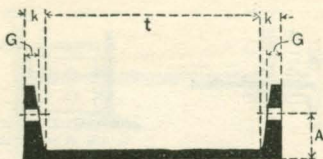
All rivets in standard framing angles are 1/4" diameter.

Weights of standard framing angles include weight of shop and field rivets.

TABLE OF MINIMUM SPAN LENGTHS, in feet, which, with full working load, uniformly distributed, will not overstrain the standard connection; based on single shear value of field rivets or, if less, the value of shop rivets.

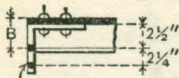
Size.	6" I 12.5	5" I 10.0	4" I 7.7	3" I 5.7	
Span.	4.4	2.9	2.0	1.2	
Size.	15" C 33.9	12" C 20.7	10" C 15.3	9" C 13.4	8" C 11.5
Span.	12.6	6.1	4.1	3.2	2.6
Size.	7" C 9.8	6" C 8.2	5" C 6.7	4" C 5.4	3" C 4.1
Span.	3.7	2.7	1.9	1.4	0.8

PHOENIX STANDARDS

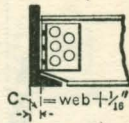
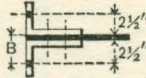


Depth of Channel, Inches.	Weight per Foot, Pounds.	Flange, Inches.	Web, Inches.	Gauge A, Inches.	Tangent t, Inches.	Distance k, Inches.	Grip G, Inches.	Maximum Rivet or Bolt, Inches.
15	55.00	3 1/2	1 1/2	2 1/4	12 1/4	1 1/2		
	50.00	3 3/8	1 1/2	2 1/4	12 1/4	1 1/2		
	45.00	3 5/8	1 1/2	2 1/4	12 1/4	1 1/2		
	40.00	3 7/8	1 1/2	1 7/8	12 1/4	1 1/2		
	35.00	3 1 1/8	1 1/2	1 7/8	12 1/4	1 1/2		
	33.90	3 1 3/8	1 1/2	1 7/8	12 1/4	1 1/2		
12	40.00	3 7/8	1 1/2	2	10	1	1 1/8	3 3/4
	35.00	3 1 1/8	1 1/2	2	10	1	1 3/8	3 3/4
	30.00	3 1 1/4	1 1/2	2	10	1	1 5/8	3 3/4
	25.00	3 3/4	1 1/2	1 3/4	10	1	1 7/8	3 3/4
	20.70	2 1 5/8	1 1/2	1 3/4	10	1	1 7/8	3 3/4
10	35.00	3 1 5/8	1 1/2	2	8 1/4	7/8	3/8	3 3/4
	30.00	3 1 3/8	1 1/2	2	8 1/4	7/8	3/8	3 3/4
	25.00	2 5/8	1 1/2	1 3/4	8 1/4	7/8	3/8	3 3/4
	20.00	2 4 7/8	1 1/2	1 1/2	8 1/4	7/8	1 5/8	3 3/4
	15.30	2 1 3/8	1 1/2	1 1/2	8 1/4	7/8	1 7/8	3 3/4
9	25.00	2 1 3/8	1 1/2	1 3/4	7 1/4	7/8	3/8	3 3/4
	20.00	2 1 1/2	1 1/2	1 3/4	7 1/4	7/8	3/8	3 3/4
	15.00	2 3 3/8	1 1/2	1 3/8	7 1/4	7/8	1 7/8	3 3/4
	13.40	2 1 5/8	1 1/2	1 3/8	7 1/4	7/8	1 7/8	3 3/4
8	21.25	2 5/8	1 1/2	1 1/2	6 1/4	7/8	3/8	3 3/4
	18.75	2 1 3/8	1 1/2	1 1/2	6 1/4	7/8	3/8	3 3/4
	16.25	2 1 7/8	1 1/2	1 1/2	6 1/4	7/8	3/8	3 3/4
	13.75	2 1 1/2	1 1/2	1 1/2	6 1/4	7/8	3/8	3 3/4
	11.50	2 1 1/4	1 1/2	1 1/4	6 1/4	7/8	3/8	3 3/4

PHOENIX STANDARDS



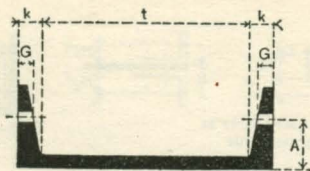
This leg punched same as 6" leg of standards



STANDARD FRAMING.

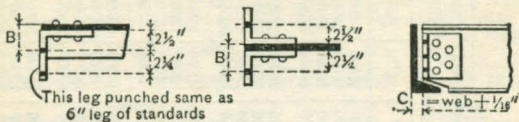
		Dist. B. Inches.	Dist. C. Inches.	Weight per foot. Pounds.	Depth of Chan. Inches.
15"	<p>2 Angles 4" x 4" x 7/16" x 0'-11 1/2" Wt. 27 lbs.</p>	3 5/16	7 7/8	55.00	15
		3 1/4	13 1/16	50.00	
		3 1/8	11 1/16	45.00	
		3	9 5/8	40.00	
		2 13/16	7 3/8	35.00	
		2 7/8	5 1/2	33.90	
12"	<p>2 Angles 4" x 4" x 7/16" x 0'-8 1/2" Wt. 20 lbs.</p>	3 1/4	13 1/16	40.00	12
		3 3/8	11 1/16	35.00	
		3	9 9/16	30.00	
		2 7/8	7 7/16	25.00	
		2 13/16	5 3/8	20.70	
8" 9" and 10"	<p>2 Angles 6" x 4" x 3/8" x 0'-5 1/2" Wt. 15 lbs</p>	3 5/16	7 7/8	35.00	9
		3 3/16	7 3/4	30.00	
		3	7 5/8	25.00	
		2 7/8	7 1/16	20.00	
		2 3/4	5 5/16	15.30	
		3 1/8	11 1/16	25.00	8
		3	10 1/2	20.00	
		2 13/16	8 3/8	15.00	
		2 3/4	6 5/16	13.40	
		3 1/16	5 5/8	21.25	
		3	5 9/16	18.75	
		2 7/8	7 7/16	16.25	
		2 13/16	5 3/8	13.75	
		2 3/4	5 1/16	11.50	

PHOENIX STANDARDS



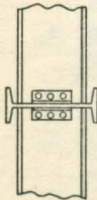
Depth of Channel, Inches.	Weight per Foot, Pounds.	Flange, Inches.	Web, Inches.	Gauge A, Inches.	Tangent t, Inches.	Distance k, Inches.	Grip G, Inches.	Maximum Rivet or Bolt, Inches.
7	19.75	$2\frac{3}{4}$	$\frac{5}{8}$	$1\frac{1}{2}$	$5\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{8}$	$\frac{5}{8}$
	17.25	$2\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{2}$	$5\frac{1}{2}$	$\frac{3}{4}$	$\frac{3}{8}$	$\frac{5}{8}$
	14.75	$2\frac{1}{4}$	$\frac{1}{2}$	$1\frac{1}{4}$	$5\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
	12.25	$2\frac{1}{4}$	$\frac{5}{16}$	$1\frac{1}{4}$	$5\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
	9.80	$2\frac{3}{8}$	$\frac{1}{4}$	$1\frac{1}{4}$	$5\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
6	15.50	$2\frac{9}{16}$	$\frac{9}{16}$	$1\frac{3}{8}$	$4\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
	13.00	$2\frac{5}{16}$	$\frac{7}{16}$	$1\frac{3}{8}$	$4\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
	10.50	$2\frac{1}{2}$	$\frac{5}{16}$	$1\frac{1}{8}$	$4\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
	8.20	$1\frac{5}{8}$	$\frac{1}{4}$	$1\frac{1}{8}$	$4\frac{1}{2}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{5}{8}$
5	11.50	$2\frac{1}{2}$	$\frac{1}{2}$	$1\frac{1}{4}$	$3\frac{3}{4}$	$\frac{5}{8}$	$\frac{5}{16}$	$\frac{1}{2}$
	9.00	$1\frac{5}{8}$	$\frac{2}{4}$	$1\frac{1}{4}$	$3\frac{3}{4}$	$\frac{5}{8}$	$\frac{5}{16}$	$\frac{1}{2}$
	6.70	$1\frac{3}{4}$	$\frac{3}{16}$	1	$3\frac{3}{4}$	$\frac{5}{8}$	$\frac{5}{16}$	$\frac{1}{2}$
4	7.25	$1\frac{3}{8}$	$\frac{2}{4}$	1	$2\frac{3}{4}$	$\frac{5}{8}$	$\frac{9}{32}$	$\frac{1}{2}$
	6.25	$1\frac{3}{8}$	$\frac{1}{4}$	1	$2\frac{3}{4}$	$\frac{5}{8}$	$\frac{9}{32}$	$\frac{1}{2}$
	5.40	$1\frac{3}{8}$	$\frac{3}{16}$	1	$2\frac{3}{4}$	$\frac{5}{8}$	$\frac{9}{32}$	$\frac{1}{2}$
3	6.00	$1\frac{3}{8}$	$\frac{3}{8}$	$\frac{1}{2}$	$1\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
	5.00	$1\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$	$1\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{4}$	$\frac{3}{8}$
	4.10	$1\frac{1}{2}$	$\frac{1}{4}$	$\frac{1}{2}$	$1\frac{3}{4}$	$\frac{5}{8}$	$\frac{1}{4}$	$\frac{3}{8}$

PHOENIX STANDARDS



STANDARD FRAMING.		Dist. B. Inches.	Dist. C. Inches.	Weight per Foot. Pounds.	Depth of Chan. Inches.
		$3\frac{1}{8}$	$1\frac{1}{8}$	19.75	
		3	$\frac{9}{16}$	17.25	
		$2\frac{13}{16}$	$\frac{1}{2}$	14.75	7
		$2\frac{13}{16}$	$\frac{3}{8}$	12.25	
		$2\frac{11}{16}$	$\frac{1}{4}$	9.80	
5" 6" and 7"	<p>2-Ls 6"x 4"x $\frac{3}{8}$" x 0'-3" Wt. 8 lbs.</p>	$3\frac{1}{16}$	$\frac{5}{8}$	15.50	
		$2\frac{13}{16}$	$\frac{1}{2}$	13.00	6
		$2\frac{13}{16}$	$\frac{3}{8}$	10.50	
		$2\frac{11}{16}$	$\frac{1}{4}$	8.20	
		3	$\frac{9}{16}$	11.50	
		$2\frac{13}{16}$	$\frac{3}{8}$	9.00	5
		$2\frac{11}{16}$	$\frac{1}{4}$	6.70	
4" and 3"	<p>2-Ls 6"x 4"x $\frac{3}{8}$" x 0'-2" Wt. 6 lbs</p>	$2\frac{13}{16}$	$\frac{3}{8}$	7.25	
		$2\frac{3}{4}$	$\frac{5}{16}$	6.25	4
		$2\frac{11}{16}$	$\frac{1}{4}$	5.40	
		$2\frac{7}{8}$	$\frac{7}{16}$	6.00	
		$2\frac{3}{4}$	$\frac{5}{16}$	5.00	3
		$2\frac{11}{16}$	$\frac{1}{4}$	4.10	

**LIMITING VALUES OF STANDARD BEAM CONNECTIONS
FOR BEAMS FRAMING OPPOSITE**



Values of Outstanding Legs, for Each Side, for Connection to Different Thicknesses of Metal, in Pounds.

Size and Weight per Foot of Beam or Channel.	Value of Shop Rivet Connection to Web, in Pounds.	FIELD RIVETS						ROUGH BOLTS						
		1/4"	1/2"	3/4"	1"	1 1/4"	1 1/2"	1 3/4"	2"	2 1/4"	2 1/2"	2 3/4"	3"	Single Shear.
		22500	28140	33780	39360	45000	50640	18000	22500	27000	31500	36000	40500	42360
24" I 79.9	67500	28140	33780	39360	45000	50640	18000	22500	27000	31500	36000	40500	42360	
20" I 65.4	45000	18760	22520	26240	30000	33760	12000	15000	18000	21000	24000	27000	28240	
18" I 54.7	41400	18760	22520	26240	30000	33760	12000	15000	18000	21000	24000	27000	28240	
15" I 42.9	36900	18760	22520	26240	30000	33760	12000	15000	18000	21000	24000	27000	28240	
15" I 36.0	26000	18760	22520	26240	30000	33760	12000	15000	18000	21000	24000	27000	28240	
12" I 35.0	29400	14070	16890	19680	22500	25320	9000	11250	13500	15750	18000	20250	21180	
12" I 31.8	23600	14070	16890	19680	22500	25320	9000	11250	13500	15750	18000	20250	21180	
12" I 27.5	17200	14070	16890	19680	22500	25320	9000	11250	13500	15750	18000	20250	21180	
10" I 25.4	27900	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
9" I 21.8	26100	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
8" I 18.4	24300	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
7" I 15.3	11300	4690	5630	6560	7500	8440	3000	3750	4500	5250	6000	6750	7060	
6" I 12.5	10400	4690	5630	6560	7500	8440	3000	3750	4500	5250	6000	6750	7060	
5" I 10 or 7" I 9.8	9500	4690	5630	6560	7500	8440	3000	3750	4500	5250	6000	6750	7060	
15" C 33.9	36000	18760	22520	26240	30000	33760	12000	15000	18000	21000	24000	27000	28240	
12" C 20.7	18900	14070	16890	19680	22500	25320	9000	11250	13500	15750	18000	20250	21180	
10" C 15.3	21600	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
9" C 13.4	20700	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
8" C 11.5	19800	9380	11260	13120	15000	16880	6000	7500	9000	10500	12000	13500	14120	
6" C 8.2	9000	4690	5630	6560	7500	8440	3000	3750	4500	5250	6000	6750	7060	

THE PHOENIX IRON COMPANY

NOTES APPLYING TO TABLE ON PRECEDING PAGE

For the value of outstanding legs of a beam connection, where beams do not frame opposite, the value will be double that given in the preceding table if same does not exceed the single shear value. Therefore, if such connection is to $\frac{1}{2}$ " metal the correct value will be found under the $\frac{1}{2}$ " metal heading. With a single connection to $\frac{3}{8}$ " metal the single shear value should be used.

ALLOWABLE UNIT STRESSES, IN POUNDS PER SQUARE INCH.

Single Shear	{	Rivets.....Shop.....12,000
		Rivets or Turned Bolts.....Field.....10,000
		Rough Bolts.....Field.....8,000
Bearing	{	Rivets, Enclosed*.....Shop.....30,000
		Rivets, Not Enclosed.....Shop.....24,000
		Rivets or Turned Bolts.....Field.....20,000
		Rough Bolts.....Field.....16,000

* Where web is enclosed between connection angles, and Shop Riveted, this higher value is permissible due to friction or grip. Values for connections in table on preceding page are for Shear or Bearing only, with no allowance for Bending.

For values in excess of those given, a special connection, designed for the greater reaction so that the unit stresses will not exceed those tabulated above, should be used.

MAXIMUM SAFE END REACTIONS, OR WEB SHEARS, For Beams and Channels. Given in Thousands of Pounds.

Size and Weight per Foot.	Max. Safe Shear.	Size and Weight per Foot.	Max. Safe Shear.	Size and Weight per Foot.	Max. Safe Shear.	Size and Weight per Foot.	Max. Safe Shear.	Size and Weight per Foot.	Max. Safe Shear.
3" I 5.7	5.1	9" I 21.8	26.1	15" I 60.8	88.5	3" C 4.1	5.1	8" C 18½	39.2
" 6½	7.9	" 25	36.5	" 65	102.9	" 5	7.9	" 21½	46.6
" 7½	10.8	" 30	51.2	" 70	117.6	" 6	10.9		
		" 35	65.9	" 75	132.3			9" C 13.4	20.7
4" I 7.7	7.6					4" C 5.4	7.2	" 15	25.9
" 8½	10.5	10" I 25.4	31.0	15" I 81.3	120.0	" 6½	10.1	" 20	40.7
" 9½	13.5	" 30	45.5	" 85	134.7	" 7½	13.0	" 25	55.3
" 10½	16.4	" 35	60.2	" 90	149.4				
		" 40	74.9	" 95	164.1	5" C 6.7	9.5	10" C 15.3	24.0
5" I 10	10.5			" 100	178.8	" 9	16.5	" 20	38.2
" 12½	17.8	12" I 27½	30.6			" 11½	23.8	" 25	52.9
" 14½	25.2			18" I 54.7	82.8			" 30	67.6
		12" I 31.8	42.0	" 60	99.9	6" C 8.2	12.0	" 35	82.3
6" I 12.5	13.8	" 35	52.3	" 65	114.7	" 10½	19.1		
" 14½	21.1			" 70	129.4	" 13	26.4	12" C 20.7	33.6
" 17½	28.5	12" I 40.8	55.2			" 15½	33.8	" 25	46.8
		" 45	69.1	20" I 65.4	100.0			" 30	61.6
7" I 15.3	17.5	" 50	83.9	" 70	115.0	7" C 9.8	14.7	" 35	76.3
" 17½	24.7	" 55	98.5	" 75	129.8	" 12½	22.3	" 40	91.0
" 20	32.1					" 14½	29.6		
		15" I 36	43.3	20" I 81.4	120.0	" 17½	37.0	15" C 33.9	60.0
8" I 18.4	21.6			" 85	132.6	" 19½	44.3	" 35	63.9
" 20½	28.6	15" I 42.9	61.5	" 90	147.4			" 40	78.6
" 23	35.9	" 45	69.0	" 95	162.0	8" C 11.5	17.6	" 45	93.3
" 25½	43.3	" 50	83.7	" 100	176.8	" 13½	24.6	" 50	108.0
		" 55	98.4			" 16½	31.9	" 55	122.7

The values for maximum safe shears given above can be realized only when beam or channel has sufficient end bearing so as not to crush the web acting as a column. The values are 10,000 lbs. times gross web area.

THE PHOENIX IRON COMPANY

STANDARD CAST IRON SEPARATORS FOR PHOENIX I-BEAMS

Separators for 24" Beams are made of $\frac{3}{8}$ " metal.
 All other Separators are made of $\frac{1}{2}$ " metal.
 All bolts $\frac{3}{4}$ " diameter.

SEPARATORS WITH TWO BOLTS

Section Number.	Designation of Beam.		Distances.			Bolts.	Weights.					
	Depth, Inches.	Weight, Pounds.	O. to O. of Flanges of Beams, Inches.	C. to C. of Beams, Inches.	Length, Inches.		Distance C. to C. of holes, Inches.	Length, Inches.	Bolts and Nuts, Pounds.	Increase in Weight of Bolts for 1" Additional Spread of Beams, Pounds.	Separator, Pounds.	Increase in Weight of Separator for 1" Additional Spread of Beams, Pounds.
208	24	79.9	14 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{2}$	13	8 $\frac{1}{2}$	2.92	.25	25.	3.25	27.92
206	20	81.4	13 $\frac{1}{2}$	7	6 $\frac{1}{2}$	13	8 $\frac{3}{8}$	2.89	.25	16.	2.08	18.89
207	20	65.4	12 $\frac{1}{2}$	6	6	13	8	2.74	.25	15.	2.08	17.74
207	18	54.7	12 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	12	7 $\frac{1}{2}$	2.68	.25	14.	2.00	16.68
161	15	81.3	13 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{1}{2}$	9	8 $\frac{1}{2}$	2.86	.25	12.	1.6	14.86
162	15	60.8	12 $\frac{1}{2}$	6 $\frac{1}{2}$	5 $\frac{3}{8}$	9	7 $\frac{7}{8}$	2.71	.25	11.5	1.6	14.21
164	15	42.9	11 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	9	7 $\frac{1}{2}$	2.53	.25	11.	1.6	13.53
252	15	36.0	11 $\frac{1}{2}$	5 $\frac{1}{2}$	5 $\frac{1}{2}$	9	7	2.50	.25	11.3	1.6	13.80
165	12	40.8	10 $\frac{1}{2}$	5 $\frac{1}{2}$	5	6 $\frac{1}{2}$	7	2.50	.25	8.5	1.2	11.00
166	12	31.8	10 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{2}$	6 $\frac{1}{2}$	6 $\frac{1}{2}$	2.41	.25	8.5	1.2	10.91
253	12	27.5	10 $\frac{1}{2}$	5 $\frac{1}{2}$	5	6 $\frac{1}{2}$	6 $\frac{1}{2}$	2.38	.25	8.5	1.2	10.88
221	10	25.4	9 $\frac{1}{2}$	5	4 $\frac{1}{2}$	5 $\frac{1}{2}$	6 $\frac{1}{2}$	2.30	.25	7.5	1.0	9.80
209	9	21.8	8 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	5 $\frac{1}{2}$	2.21	.25	6.5	.88	8.71

SEPARATORS WITH ONE BOLT

210	8	18.4	8 $\frac{1}{2}$	4 $\frac{1}{2}$	4	....	5 $\frac{1}{2}$	1.06	.125	4.5	.78	5.56
211	7	15.3	7 $\frac{1}{2}$	4	3 $\frac{1}{2}$	....	5 $\frac{1}{2}$	1.03	.125	4.0	.65	5.03
212	6	12.5	7	3 $\frac{1}{2}$	3 $\frac{1}{2}$	....	4 $\frac{1}{2}$	.99	.125	3.0	.50	3.99
214	5	10.0	6 $\frac{1}{2}$	3 $\frac{1}{2}$	3	....	4 $\frac{1}{2}$	.94	.125	2.5	.40	3.44
213	4	7.7	5 $\frac{1}{2}$	3	2 $\frac{1}{2}$	....	4 $\frac{1}{2}$	.89	.125	2.0	.30	2.89
222	3	5.7	5	2 $\frac{1}{2}$	2 $\frac{1}{2}$	....	3 $\frac{1}{2}$	.87	.125	0.4	.15	1.27

3" Beam, 1" Gas Pipe Separator.

THE PHOENIX IRON COMPANY

REDUCTION OF AREA FOR RIVET HOLES

Area in Square Inches = Diameter of Hole by Thickness of Metal.

Thick-ness of Metal. Inches.	Diameter of Hole in Inches											
	$\frac{1}{16}$ "	$\frac{1}{8}$ "	$\frac{3}{16}$ "	$\frac{1}{2}$ "	$\frac{5}{8}$ "	$\frac{3}{4}$ "	$\frac{7}{8}$ "	1 "	$1\frac{1}{8}$ "	$1\frac{1}{4}$ "	$1\frac{3}{8}$ "	$1\frac{1}{2}$ "
$\frac{1}{16}$	.08	.09	.11	.12	.13	.14	.15	.16	.18	.19	.20	.21
$\frac{1}{8}$	.11	.13	.14	.16	.17	.19	.20	.22	.23	.25	.27	.28
$\frac{3}{16}$	.14	.16	.18	.20	.21	.23	.25	.27	.29	.31	.33	.35
$\frac{1}{2}$	.16	.19	.21	.23	.26	.28	.30	.33	.35	.38	.40	.42
$\frac{5}{8}$	.19	.22	.25	.27	.30	.33	.36	.38	.41	.44	.46	.49
$3/8$	.22	.25	.28	.31	.34	.38	.41	.44	.47	.50	.53	.56
$7/8$	.25	.28	.32	.35	.39	.42	.46	.49	.53	.56	.60	.63
1	.27	.31	.35	.39	.43	.47	.51	.55	.59	.63	.66	.70
$1\frac{1}{8}$	.30	.34	.39	.43	.47	.52	.56	.60	.64	.69	.73	.77
$1\frac{1}{4}$	.33	.38	.42	.47	.52	.56	.61	.66	.70	.75	.80	.84
$1\frac{3}{8}$	.36	.41	.46	.51	.56	.61	.66	.71	.76	.81	.86	.91
$1\frac{1}{2}$	.38	.44	.49	.55	.60	.66	.71	.77	.82	.88	.93	.98
$1\frac{5}{8}$	.41	.47	.53	.59	.64	.70	.76	.82	.88	.94	1.00	1.05
$1\frac{3}{4}$	.44	.50	.56	.63	.69	.75	.81	.88	.94	1.00	1.06	1.13
$1\frac{7}{8}$	.46	.53	.60	.66	.73	.80	.86	.93	1.00	1.06	1.13	1.20
$1\frac{9}{8}$	.49	.56	.63	.70	.77	.84	.91	.98	1.05	1.13	1.20	1.27
$1\frac{5}{4}$	.52	.59	.67	.74	.82	.89	.96	1.04	1.11	1.19	1.26	1.34
$1\frac{3}{2}$	.55	.63	.70	.78	.86	.94	1.02	1.09	1.17	1.25	1.33	1.41
$1\frac{5}{4}$	.57	.66	.74	.82	.90	.98	1.07	1.15	1.23	1.31	1.39	1.48
$1\frac{3}{2}$	.60	.69	.77	.86	.95	1.03	1.12	1.20	1.29	1.38	1.46	1.55
$1\frac{7}{4}$	.63	.72	.81	.90	.99	1.08	1.17	1.26	1.35	1.44	1.53	1.62
$1\frac{1}{2}$	.66	.75	.84	.94	1.03	1.13	1.22	1.31	1.41	1.50	1.59	1.69

STAGGER OF RIVETS TO MAINTAIN NET SECTION

Dimensions in Inches

a	$\frac{1}{4}$ " Rivet	$\frac{1}{2}$ " Rivet	a'	$\frac{1}{4}$ " Rivet	$\frac{1}{2}$ " Rivet
	b	b		b	b
1	$1\frac{1}{8}$	$1\frac{1}{4}$	5	$3\frac{1}{8}$	$3\frac{1}{8}$
$1\frac{1}{2}$	$1\frac{1}{2}$	2	$5\frac{1}{2}$	$3\frac{3}{8}$	$3\frac{3}{8}$
2	$2\frac{1}{8}$	$2\frac{1}{2}$	6	$3\frac{5}{8}$	$3\frac{5}{8}$
$2\frac{1}{2}$	$2\frac{1}{2}$	$2\frac{3}{4}$	$6\frac{1}{2}$	$3\frac{7}{8}$	$3\frac{7}{8}$
3	$2\frac{3}{8}$	$2\frac{5}{8}$	7	$3\frac{7}{8}$	$3\frac{7}{8}$
$3\frac{1}{2}$	$2\frac{3}{4}$	$2\frac{3}{4}$	$7\frac{1}{2}$	$3\frac{7}{8}$	4
4	$2\frac{1}{2}$	3	8	$3\frac{7}{8}$	$4\frac{1}{2}$
$4\frac{1}{2}$	$2\frac{3}{4}$	$3\frac{3}{8}$	$8\frac{1}{2}$	4	$4\frac{1}{2}$

y = diameter of rivet + $\frac{1}{8}$ "

$$a - y = \sqrt{a^2 + b^2} - 2y$$

$$a' - 2y = \sqrt{a^2 + b^2} - 3y$$

$$b = \sqrt{2ay + y^2}$$

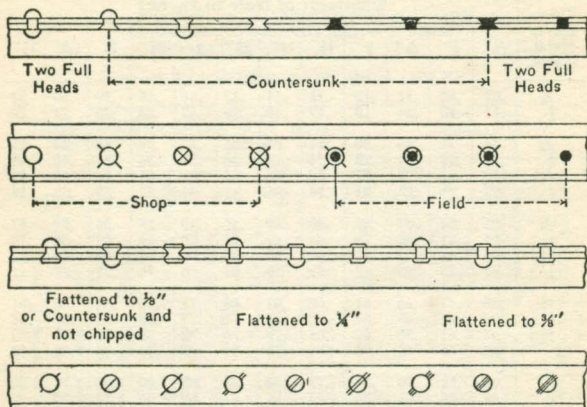
$$b = \sqrt{2ay + y^2}$$

a = sum of gauges minus thickness of angle.

$\frac{1}{4}$ " rivets can be taken at $\frac{1}{8}$ " less than for $\frac{1}{2}$ " rivets.

1" rivets can be taken at $\frac{1}{8}$ " more than for $\frac{1}{2}$ " rivets.

CONVENTIONAL SIGNS FOR RIVETING



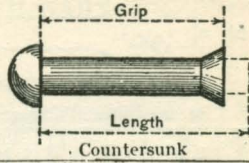
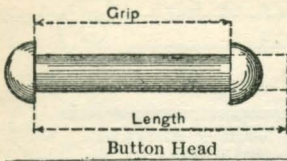
SIZES OF RIVET HEADS AND CLEARANCES FOR MACHINE DRIVING

Size.	Head.		Countersunk.	
	Diam.	Height.	Depth.	Diam.
$\frac{1}{2}$	$\frac{3}{8}$	$\frac{7}{8}$	$\frac{5}{16}$	$\frac{7}{8}$
$\frac{5}{8}$	$\frac{15}{32}$	$1\frac{3}{32}$	$\frac{5}{16}$	1
$\frac{3}{4}$	$\frac{9}{16}$	$1\frac{5}{16}$	$\frac{5}{16}$	$1\frac{1}{8}$
$\frac{7}{8}$	$\frac{21}{32}$	$1\frac{7}{32}$	$\frac{5}{16}$	$1\frac{1}{4}$
1	$\frac{3}{4}$	$1\frac{3}{4}$		

A must not be less than $\frac{3}{8}$ in. + $\frac{1}{2}$ H

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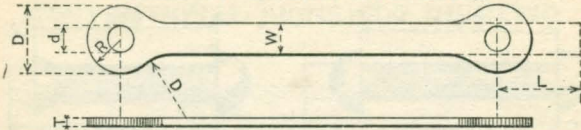
LENGTHS OF RIVETS FOR VARIOUS GRIPS



Grip in Inches.	Diameter in Inches.					Diameter in Inches.		
	3/8	1/2	5/8	3/4	7/8	5/8	3/4	7/8
	Length in Inches.					Length in Inches.		
3/8	1 1/4	1 3/8	1 3/4	1 7/8	2 1/8	1 1/4	1 3/8	1 3/8
7/16	1 3/8	1 1/2	1 7/8	2	2 1/8	1 3/8	1 3/8	1 1/2
1/2	1 1/2	1 5/8	2	2 1/8	2 3/8	1 1/2	1 1/2	1 5/8
5/8	1 3/4	2	2 1/8	2 1/4	2 1/2	1 5/8	1 5/8	1 3/4
3/4	1 7/8	2 1/8	2 1/4	2 3/8	2 5/8	1 3/4	1 3/4	1 7/8
7/8	2	2 1/8	2 1/4	2 3/8	2 5/8	1 3/4	1 3/4	1 7/8
1 1/16	2 1/8	2 1/4	2 3/8	2 1/2	2 3/4	1 7/8	1 7/8	2
1 1/8	2 1/4	2 3/8	2 1/2	2 5/8	2 7/8	2	2	2 1/8
1 1/4	2 3/8	2 1/2	2 5/8	2 3/4	3	2 1/8	2 1/8	2 1/4
1 1/2	2 1/2	2 5/8	2 3/4	2 7/8	3 1/8	2 1/4	2 3/8	2 5/8
1 5/8	2 5/8	2 3/4	2 7/8	3 1/8	3 1/4	2 3/8	2 1/2	2 1/2
1 7/8	2 3/4	2 7/8	3	3 1/4	3 3/8	2 5/8	2 3/4	2 3/4
2	2 7/8	3	3 1/4	3 1/2	3 1/2	2 5/8	2 7/8	2 7/8
2 1/16	3	3 1/8	3 1/2	3 5/8	3 3/4	2 7/8	2 7/8	3
2 1/8	3 1/4	3 3/8	3 5/8	3 3/4	3 7/8	3	3 1/8	3 1/8
2 1/4	3 3/8	3 1/2	3 3/4	3 7/8	4	3 1/8	3 1/4	3 1/4
2 1/2	3 1/2	3 5/8	3 7/8	4	4 1/8	3 1/4	3 3/8	3 3/8
2 3/8	3 5/8	3 3/4	4	4 1/8	4 1/4	3 3/8	3 1/2	3 1/2
2 1/2	3 3/4	3 7/8	4 1/8	4 1/4	4 3/8	3 1/2	3 5/8	3 5/8
2 7/8	3 7/8	4	4 1/4	4 3/8	4 1/2	3 5/8	3 3/4	3 3/4
2 5/8	4	4 1/8	4 3/8	4 1/2	4 5/8	3 3/4	3 7/8	3 7/8
2 3/4	4 1/8	4 1/4	4 1/2	4 3/4	4 3/4	4	4	4 1/8
3 1/16	4 1/4	4 3/8	4 5/8	4 7/8	4 7/8	...	...	...
3 1/8	4 3/8	4 1/2	4 3/4	5	5	...	...	...
3 1/4	4 1/2	4 5/8	4 7/8	5 1/8	5 1/4	...	...	...
3 1/2	4 5/8	4 3/4	5	5 1/4	5 3/8	...	...	...
3 3/4	4 3/4	4 7/8	5 1/8	5 3/8	5 1/2	...	...	...
3 7/8	4 7/8	5	5 1/4	5 1/2	5 5/8	...	...	...
4	5	5 1/8	5 3/8	5 5/8	5 3/4	...	...	...
4 1/16	5 1/8	5 1/4	5 5/8	5 3/4	6	...	...	...
4 1/8	5 1/4	5 3/8	5 7/8	6	6 1/8	...	...	...
4 1/4	5 3/8	5 1/2	6 1/8	6 1/4	6 1/4	...	...	...
4 1/2	5 1/2	5 5/8	6 1/8	6 1/4	6 3/8	...	...	...
4 3/4	5 3/4	5 7/8	6 1/4	6 3/8	6 1/2	...	...	...
4 7/8	5 7/8	6	6 1/2	6 5/8	6 3/4	...	...	...
5	6	6 1/8	6 3/4	6 3/4	6 7/8	...	...	...
5 1/16	6 1/8	6 1/4	6 3/4	6 7/8	7 1/4
5 1/8	6 1/4	6 3/8	6 3/4	6 7/8	7 1/4
5 1/4	6 3/8	6 1/2	6 3/4	7 1/8	7 5/8
5 1/2	6 1/2	6 3/4	6 3/4	7 1/8	7 5/8

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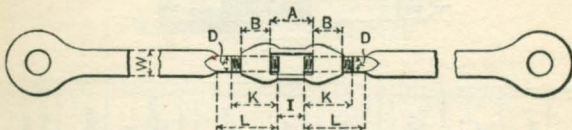
TABLE OF STEEL EYE BARS



Width of Bar, Inches.	Range of Thickness, Inches.	Size of Pin, Inches.	Dia. of Head, Inches.	Additional Length of Bar beyond Centres of Eyes to form 2 Eyes. These Lengths are Approximate only. Before Material is Ordered Maker Should be Consulted.	Excess of Sectional Area of Head over that of Body of Bar for largest Pin given	Remarks.
W	T	d	D	2 L		
3	to 1	2 1/8	7	2x(12 1/2" + 3 1/2") = 2'- 8"	52%	
3	to 1	2 1/8 & 3 1/8	8	2x(14" + 4") = 3'- 0"	52%	
3	to 1	3 1/8 & 4 1/8	8 1/2	2x(14" + 4") = 3'- 0"	40%	
4	to 1	3 1/8	9	2x(11 1/2" + 4 1/2") = 2'- 8"	39%	
4	to 1	3 1/8 & 4 1/8	10	2x(14" + 5") = 3'- 2"	42%	
*4	to 1	4 1/8 & 5 1/8	11	2x(18" + 5 1/2") = 3'- 11"	42%	
*4	to 1	5 1/8 & 5 1/8	11 1/2	2x(22" + 5 1/2") = 4'- 7 1/2"	42%	
5	to 1	3 1/8	11	2x(14" + 5 1/2") = 3'- 3"	41%	
5	to 1	4 1/8 & 4 1/8	12	2x(16" + 6") = 3'- 8"	41%	
5	to 1	5 1/8 & 5 1/8	12 1/2	2x(20" + 6 1/2") = 4'- 4 1/2"	39%	
5	to 1	5 1/8 & 5 1/8	13	2x(20" + 6 1/2") = 4'- 5"	44%	
*5	to 1	6 1/8 & 6 1/8	14	2x(24" + 7") = 5'- 2"	46%	
6	to 2	4 1/8	13	2x(15" + 6 1/2") = 3'- 7"	45%	
6	to 2	4 1/8 & 5 1/8	14	2x(16 1/2" + 7") = 3'- 11"	45%	
6	to 2	5 1/8 & 6 1/8	15	2x(19 1/2" + 7 1/2") = 4'- 6"	45%	
*6	to 2	6 1/8 & 7 1/8	16	2x(22" + 8") = 5'- 0"	45%	
7	to 2	4 1/8	15	2x(16" + 7 1/2") = 3'- 11"	44%	
7	to 2	5 1/8 & 5 1/8	16	2x(18" + 8") = 4'- 4"	45%	
7	to 2	6 1/8 & 6 1/8	17	2x(20" + 8 1/2") = 4'- 9"	44%	
*7	to 2	7 1/8 & 7 1/8	18	2x(24" + 9 1/2") = 5'- 6"	47%	
8	to 2	5 1/8	17	2x(16 1/2" + 8") = 4'- 2"	43%	
8	to 2	5 1/8 & 6 1/8	18	2x(19" + 9") = 4'- 8"	41%	
8	to 2	6 1/8 & 7 1/8	19	2x(23" + 9 1/2") = 5'- 5"	41%	
8	to 2	8 1/8 & 8 1/8	20	2x(25" + 10") = 5'- 10"	39%	
*8	to 2	8 1/8 & 9 1/8	21	2x(29" + 10 1/2") = 6'- 7"	45%	
9	to 2	7 1/8	20	2x(24" + 10") = 5'- 8"	41%	
9	to 2	7 1/8 & 8 1/8	21	2x(26" + 10") = 6'- 0"	40%	
9	to 2	8 1/8 & 9 1/8	22	2x(29" + 10") = 6'- 6"	40%	
10	to 2 1/2	7 1/8	22	2x(24" + 11") = 5'- 10"	43%	
10	to 2 1/2	8 1/8 & 8 1/8	23	2x(27" + 11 1/2") = 6'- 5"	41%	
10	to 2 1/2	9 1/8 & 10	24	2x(30" + 12") = 7'- 0"	40%	
*10	to 2 1/2	12	27	.....	50%	
12	to 2 1/2	8 1/8 & 8 1/8	27	.....	51%	
12	to 2 1/2	9 1/8 & 10	28	.....	50%	
12	to 2 1/2	10 1/8 & 11	29	.....	50%	
12	to 2 1/2	11 & 11 1/2	29 1/2	.....	50%	
12	to 2 1/2	11 1/2 & 12	30	.....	50%	
12	to 2 1/2	12 & 12 1/2	30 1/2	.....	50%	
14	to 2 1/2	12	32	.....	43%	
14	to 2 1/2	12	32 1/2	.....	46%	
14	to 2 1/2	13	33	.....	43%	
14	to 2 1/2	14	33 1/2	.....	39%	
15	to 2 1/2	12 1/2	33 1/2	.....	40%	
15	to 2 1/2	13 1/2	34 1/2	.....	40%	
15	to 2 1/2	14	35 1/2	.....	43%	
16	to 2 1/2	16	38 1/2	.....	41%	

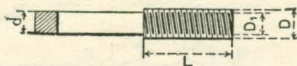
Thickness of Head same as that of Bar (T), or not to vary more than 1/8". X = Excess of Sectional Area of Head over that of Body of Bar to be about 40 per cent. or more. Sizes of Heads for Bars marked * should be used only in unavoidable cases. As sizes of Heads are apt to overrun and may sometimes be slightly under size f. i. 16" (+ 1/4") given, state greatest allowable variations, thus:

TABLE OF UPSET SCREW ENDS
FOR FLAT EYE BARS
STEEL



Size of Flat Bar, Inches.	Area, \square Inches.	Dia. of Upset, \circ Inches.	Dia. at Root, Inches.	Area under Root, \square Inches.	Excess of Area at Root over Area of Bar.	Length of Upset, Inches.	Length of Thread, Inches.	Distance between Ends, Inches.	Clear Length of Turnb. Inches.	Add for Upset of Bar, Inches.
WT		D				L	K	I	A	
3 x 3/4	2.25	2 1/4	1.962	3.023	34%	8	5 3/4	3 5/8	6	16
3 x 7/8	2.625	2 1/4	1.962	3.023	15%	8	5 3/4	3 5/8	6	
3 x 1	3.00	2 1/4	2.176	3.719	24%	9	6 1/4	3 1/2	6	
3 x 1 1/4	3.375	2 5/8	2.300	4.155	23%	9 1/2	6 3/4	3 1/4	6	
3 x 1 1/2	3.75	2 5/8	2.426	4.622	23%	10	7 1/4	2 3/4	6	
3 x 1 3/8	4.125	2 5/8	2.550	5.107	24%	10 1/2	7 1/2	2 3/8	6	
3 x 1 1/2	4.50	3	2.629	5.428	21%	11	7 3/4	2 3/4	6	
4 x 3/4	3.00	2 1/2	2.176	3.719	24%	9	6 1/2	3 1/4	6	16
4 x 7/8	3.50	2 5/8	2.300	4.155	19%	9 1/2	6 3/4	3 1/4	6	
4 x 1	4.00	2 5/8	2.426	4.622	16%	10	7 1/4	2 3/4	6	
4 x 1 1/8	4.50	3	2.629	5.428	21%	11	7 3/4	2 3/8	6	
4 x 1 1/4	5.00	3 1/4	2.879	6.509	30%	11 1/2	8 1/4	2 3/8	6	
4 x 1 3/8	5.50	3 1/4	2.879	6.509	18%	11 1/2	8 1/4	2 3/4	6	
4 x 1 1/2	6.00	3 1/2	3.100	7.547	26%	12 1/2	9	2 1/4	6	
5 x 3/4	3.75	2 3/4	2.426	4.622	23%	10	7 1/4	2 7/8	6	20
5 x 7/8	4.375	2 7/8	2.550	5.107	17%	10 1/2	7 1/2	2 3/8	6	
5 x 1	5.00	3 1/4	2.879	6.509	30%	11 1/2	8 1/4	2 3/4	6	20
5 x 1 1/8	5.625	3 1/4	2.879	6.509	16%	11 1/2	8 1/4	2 3/4	6	
5 x 1 1/4	6.25	3 1/2	3.100	7.547	21%	12 1/2	9	2 1/4	6	
5 x 1 3/8	6.875	3 3/4	3.317	8.641	26%	14	10	2 1/4	6	
5 x 1 1/2	7.50	3 3/4	3.317	8.641	15%	14	10	2 1/4	6	
5 x 1 5/8	8.125	4	3.567	9.993	23%	14	10	2 1/4	6	
6 x 7/8	5.25	3 1/4	2.879	6.509	24%	11 1/2	8 3/4	2 3/4	6	
6 x 1	6.00	3 1/2	3.100	7.547	26%	12 1/2	9	2 1/4	6	
6 x 1 1/8	6.75	3 3/4	3.317	8.641	28%	14	10	2 1/4	6	
6 x 1 1/4	7.50	3 3/4	3.317	8.641	15%	14	10	2 1/4	6	
6 x 1 3/8	8.25	4	3.567	9.993	21%	14	10	2 1/4	6	
7 x 1	7.00	3 3/4	3.317	8.641	23%	14	10	2 1/4	6	
7 x 1 1/8	7.875	4	3.567	9.993	27%	14	10	2 1/4	6	
7 x 1 1/4	8.75	4 1/4	3.798	11.329	29%	....	....	...	.
8 x 1	8.00	4	3.567	9.993	25%	14	10	2 1/4	6	
8 x 1 1/8	9.00	4 1/4	3.798	11.329	26%	....	....	...	.

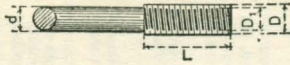
TABLE OF UPSETS ON SQUARE BARS
STEEL



Side of Bar. Inches.	Diameter of Upset. Inches.	Length of Upset. Inches.	Diameter at Root of Thread. Inches.	Area at Root of Thread. □ Inches.	No. of Threads. Per Inch.	Area of Body of Bar. □ Inches.	Weight per Foot of Bar. Pounds	Add for One Upset. Inches.	Excess of Area at Root Over Area of Bar.
<i>d</i>	<i>D</i>	<i>L</i>	<i>D1</i>						
5/8	1	2 3/4	.837	.550	8	.391	1.328	6	41%
3/4	1 1/8	3	.940	.693	7	.563	1.913	6	23%
7/8	1 3/8	3 3/4	1.160	1.056	6	.766	2.603	6	38%
1	1 1/2	4	1.284	1.295	6	1.000	3.400	6	30%
1 1/8	1 5/8	4 1/4	1.389	1.515	5 1/2	1.266	4.303	6	20%
1 1/4	1 7/8	5	1.616	2.051	5	1.563	5.312	6	31%
1 3/8	2	5 1/4	1.712	2.301	4 1/2	1.891	6.428	6	22%
1 1/2	2 1/8	5 1/2	1.836	2.648	4 1/2	2.250	7.650	6	18%
1 5/8	2 3/8	6 1/4	2.086	3.418	4 1/2	2.641	8.978	8	29%
1 3/4	2 1/2	6 1/2	2.176	3.719	4	3.063	10.41	8	21%
1 7/8	2 5/8	6 3/4	2.300	4.155	4	3.516	11.95	8	18%
2	2 7/8	7 1/2	2.550	5.107	4	4.000	13.60	10	28%
2 1/8	3	7 3/4	2.629	5.428	3 1/2	4.516	15.35	10	20%
2 1/4	3 1/8	8	2.754	5.957	3 1/2	5.063	17.22	10	18%
2 3/8	3 3/8	8 1/2	3.004	7.087	3 1/2	5.641	19.18	11	26%
2 1/2	3 1/2	9	3.100	7.547	3 1/4	6.250	21.25	11	21%
2 5/8	3 3/4	10	3.317	8.641	3	6.891	23.43	11	25%
2 3/4	4	10	3.567	9.993	3	7.563	25.00	12	32%
2 7/8	4	10	3.567	9.993	3	8.266	28.10	12	21%
3	4 1/4	10 1/2	3.798	11.329	2 7/8	9.000	30.60	12	26%
3 1/8	4 3/8	10 1/2	3.923	12.087	2 7/8	9.766	33.20	12	24%
3 1/4	4 1/2	10 1/2	4.028	12.743	2 3/4	10.563	35.92	12	21%
3 3/8	4 3/4	11 1/2	4.255	14.220	2 5/8	11.391	38.73	12	25%

THE PHOENIX IRON COMPANY

TABLE OF UPSETS ON ROUND BARS
STEEL



<i>d</i>	<i>D</i>	<i>L</i>	<i>D I</i>	Diameter at Root of Thread, Inches.	Area at Root of Thread, □ Inches.	No. of Threads, Per Inch.	Area of Body of Bar, □ Inches.	Weight per Foot of Bar, Pounds.	Add for One Upset, Inches.	Excess of Area at Root over Area of Bar.
1	1	2		.731	.420	9	.307	1.043	6	37%
1	1 1	2		.837	.550	8	.442	1.502	6	24%
1	1 1	3		1.065	.890	7	.601	2.044	6	48%
1	1 1	3		1.160	1.056	6	.785	2.670	6	35%
1	1 1	4		1.284	1.295	6	.994	3.379	6	30%
1	1 1	4		1.389	1.515	5 1/2	1.227	4.173	6	23%
1	1 1	4		1.491	1.746	5	1.485	5.049	6	18%
1	1 1	5		1.616	2.051	5	1.767	6.008	6	16%
1	1 2	5		1.836	2.648	4 1/2	2.074	7.051	6	28%
1	1 2	5		1.962	3.023	4 1/2	2.405	8.178	8	26%
1	1 2	6		2.086	3.418	4 1/2	2.761	9.388	8	24%
2	2	6		2.176	3.719	4	3.142	10.68	8	18%
2	2	6		2.300	4.155	4	3.547	12.06	8	17%
2	2	7		2.426	4.622	4	3.976	13.52	8	16%
2	2	7		2.550	5.107	4	4.430	15.07	10	15%
2	2 3	8		2.754	5.957	3 1/2	4.909	16.69	10	21%
2	2 3	8		2.879	6.509	3 1/2	5.412	18.40	11	20%
2	2 3	8		3.004	7.087	3 1/2	5.940	20.20	11	19%
2	2 3	9		3.100	7.547	3 1/4	6.492	22.07	11	16%
3	3	10		3.317	8.641	3	7.069	24.03	11	22%
3	3	10		3.442	9.305	3	7.670	26.08	12	21%
3	3 4	10		3.567	9.993	3	8.296	28.20	12	20%
3	3 4	10		3.692	10.706	3	8.946	30.42	12	20%
3	3 4	10		3.798	11.329	2 7/8	9.621	32.71	12	18%
3	3 4	10		4.028	12.743	2 7/8	10.321	35.09	12	23%
3	3 4	11		4.152	13.540	2 7/8	11.045	37.56	12	23%
3	3 4	11		4.255	14.220	2 7/8	11.793	40.10	12	21%
4	4	12		4.380	15.067	2 7/8	12.566	42.73	12	20%

THE PHOENIX IRON COMPANY

MAXIMUM BENDING MOMENTS FOR BEAMS AND CHANNELS

For Fibre Stress of 16,000 lbs. per Square Inch

Beams						Standard Channels		
Depth and Section Number.	Weight per Foot.		Depth and Section Number.	Weight per Foot.		Depth and Section Number.	Weight per Foot.	
	Lbs.	Moment Value. Ft. Lbs.		Lbs.	Moment Value. Ft. Lbs.		Lbs.	Moment Value. Ft. Lbs.
3 in. No. 222	5.7	2,210	12 in. No. 165	40.8	59,770	3 in. No. 116	4.1	1,450
	6.5	2,390		45.0	63,490		5.0	1,640
	7.5	2,590		50.0	67,410		6.0	1,840
4 in. No. 213	7.7	3,980	15 in. No. 252	36.0	72,020	4 in. No. 118	5.4	2,530
	8.5	4,240		42.9	78,530		6.25	2,790
	9.5	4,500		45.0	81,040		7.25	3,050
5 in. No. 214	10.00	6,450	15 in. No. 164	50.0	85,940	5 in. No. 120	6.7	3,960
	12.25	7,260		55.0	90,850		9.0	4,730
	14.75	8,080		60.8	108,270		8.2	5,780
6 in. No. 212	12.50	9,680	15 in. No. 162	65.0	113,080	6 in. No. 144	10.5	6,720
	14.75	10,660		70.0	117,980		13.0	7,700
	17.25	11,640		75.0	122,890		15.5	8,680
7 in. No. 211	15.3	13,800	15 in. No. 161	81.3	141,470	7 in. No. 136	9.80	8,030
	17.5	14,930		85.0	145,330		12.25	9,210
	20.0	16,070		90.0	150,270		14.75	10,350
8 in. No. 210	18.4	18,960	18 in. No. 207	95.0	155,200	8 in. No. 122	17.25	11,490
	20.5	20,190		100.0	160,130		19.75	12,640
	23.0	21,500		54.7	117,860		11.50	10,770
9 in. No. 209	25.5	22,810	20 in. No. 206	60.0	124,710	9 in. No. 233	13.75	12,000
	21.8	25,160		65.0	130,590		16.25	13,310
	25.0	27,240		70.0	136,480		18.75	14,610
10 in. No. 221	30.0	30,180	20 in. No. 208	75.0	169,170	10 in. No. 130	21.25	15,920
	35.0	33,120		65.4	155,930		13.4	14,020
	25.4	32,560		70.0	162,640		15.0	15,070
12 in. No. 253	30.0	35,780	20 in. No. 208	75.0	169,170	12 in. No. 141	20.0	18,010
	35.0	39,050		81.4	196,040		25.0	20,950
	40.0	42,320		85.0	202,610		15.3	17,840
12 in. No. 166	27.5	44,350	20 in. No. 208	90.0	209,200	15 in. No. 140	20.0	20,990
	31.8	47,960		95.0	215,770		25.0	24,260
	35.0	50,730		100.0	222,350		30.0	27,530
						35.0	30,800	
						20.7	28,470	
						25.0	32,000	
						30.0	35,920	
						35.0	39,840	
						40.0	43,760	
						33.9	55,570	
						35.0	56,880	
						40.0	61,780	
						45.0	66,680	
						50.0	71,590	
						55.0	76,490	

THE PHOENIX IRON COMPANY

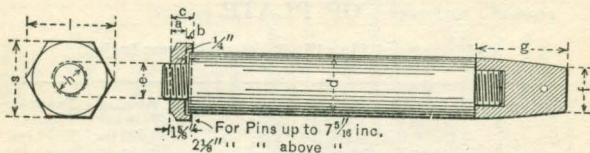
BEARING VALUES OF PINS FOR
ONE INCH THICKNESS
OF PLATE

(=Diameter of Pin \times 1" \times Stress per Square Inch.)

Diameter of Pin. Inches.	Area of Pin.	Bearing Value at 12,000 lbs. Per sq. in.	Bearing Value at 15,000 lbs. Per sq. in.	Diameter of Pin. Inches.	Area of Pin.	Bearing Value at 12,000 lbs. Per sq. in.	Bearing Value at 15,000 lbs. Per sq. in.
	Sq. In.	Lbs.	Lbs.		Sq. In.	Lbs.	Lbs.
1	.785	12000	15000	4 1/8	15.90	54000	67500
1 1/8	.994	13500	16900	4	16.80	55500	69400
1 1/4	1.227	15000	18800	4 1/4	17.72	57000	71300
1 3/8	1.485	16500	20600	4 3/8	18.67	58500	73100
1 1/2	1.767	18000	22500	5	19.64	60000	75000
1 5/8	2.074	19500	24400	5 1/8	20.63	61500	76900
1 3/4	2.405	21000	26300	5 1/4	21.65	63000	78800
1 7/8	2.761	22500	28100	5 3/8	22.69	64500	80600
2	3.142	24000	30000	5 1/2	23.76	66000	82500
2 1/8	3.547	25500	31900	5 3/8	24.85	67500	84400
2 1/4	3.976	27000	33800	5 1/2	25.97	69000	86300
2 3/8	4.430	28500	35600	5 5/8	27.11	70500	88100
2 1/2	4.909	30000	37500	6	28.27	72000	90000
2 5/8	5.412	31500	39400	6 1/8	29.46	73500	91900
2 3/4	5.940	33000	41300	6 1/4	30.68	75000	93800
2 7/8	6.492	34500	43100	6 3/8	31.92	76500	95600
3	7.069	36000	45000	6 1/2	33.18	78000	97500
3 1/8	7.670	37500	46900	6 3/8	34.47	79500	99400
3 1/4	8.296	39000	48800	6 1/2	35.79	81000	101300
3 3/8	8.946	40500	50600	6 5/8	37.12	82500	103100
3 1/2	9.621	42000	52500	7	38.48	84000	105000
3 5/8	10.32	43500	54400	7 1/2	44.18	90000	112500
3 3/4	11.05	45000	56300	8	50.27	96000	120000
3 7/8	11.79	46500	58100	8 1/2	56.75	102000	127500
4	12.57	48000	60000	9	63.62	108000	135000
4 1/8	13.36	49500	61900	10	78.54	120000	150000
4 1/4	14.19	51000	63800	11	95.03	132000	165000
4 3/8	15.03	52500	65600	12	113.10	144000	180000

THE PHOENIX IRON COMPANY

TABLE OF STANDARD PIN NUTS AND PILOTS FOR MAIN CONNECTIONS



Mark of Pin Nut and Pilot.										PILOT			
	Diameter of Pin, Inches.	Diameter of Hole, Inches.	Diameter of Thread, Inches.	Short Diam. of Nut, Inches.	Long Diam. of Nut, Inches.	Depth of Nut, Inches.	Thickness of Metal of Nut, Inches.	Depth of Recess, Inches.	Weight of One Nut.	Diam. at Shoulder, Inches.	Weight in Pounds.	Diam. at Point, Inches.	Length Over All, Inches.
	d	h	e	s	l	c	a	b		d		f	g
P- 1	2 1/8	1 1/2	1 1/2	3 1/2	4 1/8	1 1/2	1	1/2	2.5	2 1/8	4.0	1 1/8	4 1/8
P- 2	2 1/4	1 3/4	1 3/4	4 1/4	4 3/4	1 1/2	1	1/2	2.8	2 1/4	6.5	2 1/8	4 1/4
P- 3	3 1/8	2 1/4	2 1/4	4 3/8	5 1/8	1 1/2	1	1/2	3.3	3 1/8	10.0	2 1/4	5 1/8
P- 4	3 1/4	2 1/2	2 1/2	5 1/4	5 1/2	1 1/2	1	1/2	4.7	3 1/4	15.0	2 1/2	5 1/4
P- 5	4 1/8	2 3/4	2 3/4	5 3/4	6 1/8	1 1/2	1	1/2	4.9	4 1/8	18.0	3 1/8	6 1/8
P- 6	4 1/4	3	3 1/4	5 3/4	6 1/4	1 1/2	1	1/2	5.25	4 1/4	22.0	3 1/4	6 1/4
P- 7	4 1/2	3 1/4	3 3/4	6 1/2	7 1/8	1 1/2	1	1/2	6.4	4 1/2	26.5	3 1/2	6 1/2
P- 8	5 1/8	3 1/2	3 3/4	6 1/2	7 1/2	1 1/2	1	1/2	7.0	5 1/8	29.5	3 3/8	7 1/8
P- 9	5 1/4	3 3/4	3 3/4	6 3/4	7 1/4	1 1/2	1	1/2	7.4	5 1/4	34.0	3 3/4	7 1/4
P-10	5 1/2	3 3/4	3 3/4	7	8 1/8	1 1/2	1	1/2	7.4	5 1/2	39.5	4 1/8	7 1/2
P-11	6 1/8	4 1/4	4 1/2	7 1/2	8 1/4	1 1/2	1	1/2	7.5	6 1/8	51.0	4 1/4	8 1/8
P-12	6 1/4	4 1/2	4 1/2	7 3/4	9 1/4	1 1/2	1	1/2	7.6	6 1/4	65.0	4 1/2	8 1/4
P-13	6 1/2	4 1/2	4 1/2	8 1/4	9 1/2	1 1/2	1	1/2	8.0	6 1/2	70.0	4 1/2	8 1/2
P-14	7 1/8	4 3/4	5 1/4	8 1/2	9 1/2	1 1/2	1	1/2	8.5	7 1/8	83.0	5 1/8	9 1/8
P-15	7 1/4	5 1/4	5 1/4	9	10 1/4	2	1 1/4	3/4	19.0	7 1/4	93.0	5 1/4	10 1/4
P-16	8 1/4	5 3/4	5 3/4	9 1/4	11 1/4	2	1 1/4	3/4	19.9	8 1/4	116.0	5 3/4	11
*P-17	8 1/2	6 1/4	6 1/4	10 1/4	11 1/2	2	1 1/2	3/4	20.3	8 1/2	134.0	5 3/4	11 1/2
*P-18	9 1/4	6 3/4	6 3/4	10 3/4	12 1/8	2	1 1/2	3/4	21.3	9 1/4	155.5	6 1/4	12
*P-19	10	7 1/4	7 1/4	11 1/4	13 1/4	2	1 1/2	3/4	24.1	10	189.0	6 3/4	12 3/4
*P-20	10 1/2	7 3/4	7 3/4	11 3/4	13 1/2	2	1 1/2	3/4	25.0	10 1/2	246.0	7	13 3/4
*P-21	11	8 1/4	8 1/4	12 1/4	14 1/4	2	1 1/2	3/4	26.5	11	267.0	8	13 3/4

* These nuts are steel castings. The smaller nuts are drop forged.

ADDITION FOR TURNING

To 4 1/2" inclusive allow 1/2" - 1/8" to 2' 0" long, and allow 1/2" - 1/8" above 2' 0" long.

Over 4 1/2" allow not less than 1/8" to 2' 0" long, and allow 1/2" above 2' 0" long.

THE PHOENIX IRON COMPANY

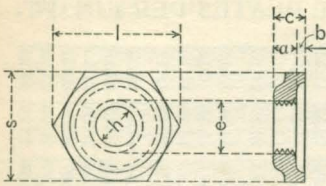


TABLE OF
STANDARD MALLE-
ABLE PIN NUTS
FOR
LATERALS
AND SECONDARY
CONNECTIONS

Mark of Nut.	Diameter of Hole.	Diameter of Thread.	Short Diameter.	Long Diameter.	Depth of Nut.	Thickness of Metal.	Depth of Recess.	Weight of One Nut. Pounds.
	<i>h</i>	<i>e</i>	<i>s</i>	<i>l</i>	<i>c</i>	<i>a</i>	<i>b</i>	
PN	27/64	3	4 1/2	5 3/16	1	5/8	3/4	2.075
PP	23/44	2 7/8	4 1/2	5 3/16	1	5/8	3/4	2.168
PQ	2	2 3/4	4 1/2	5 3/16	1	5/8	3/4	2.257
PR	2 1/2	2 5/8	4 1/2	5 3/16	1	5/8	3/4	2.342
PS	2	2 1/2	4 1/2	5 3/16	1	5/8	3/4	2.423
PT	2 1/4	2 3/8	4 1/2	5 3/16	1	5/8	3/4	2.50
PU	2 1/8	2 1/4	4 1/2	5 3/16	1	5/8	3/4	2.572
PV	2	2 1/8	4 1/2	5 3/16	1	5/8	3/4	2.641
PW	1 7/8	2	4 1/2	5 3/16	1	5/8	3/4	2.705
PX	2 1/8	2 1/4	3 3/4	4 5/16	1	5/8	3/4	1.623
PO	2	2 1/8	3 3/4	4 5/16	1	5/8	3/4	1.691
PV	1 7/8	2	3 3/4	4 5/16	1	5/8	3/4	1.755
PA	1 3/4	1 7/8	3 3/4	4 5/16	1	5/8	3/4	1.816
PZ	1 1/2	1 3/4	3 3/4	4 5/16	1	5/8	3/4	1.872
PB	1 1/2	1 3/4	3 1/4	3 3/4	7/8	5/8	1/4	1.191
PC	1 1/2	1 5/8	3 1/4	3 3/4	7/8	5/8	1/4	1.244
PD	1 1/2	1 1/2	3 1/4	3 3/4	7/8	5/8	1/4	1.292
PE	1 1/4	1 3/8	3 1/4	3 3/4	7/8	5/8	1/4	1.335
PF	1 1/8	1 1/4	3 1/4	3 3/4	7/8	5/8	1/4	1.373
PG	1 1/8	1 1/2	2 5/8	3 1/2	7/8	5/8	1/4	0.754
PH	1 1/4	1 3/8	2 5/8	3 1/2	7/8	5/8	1/4	0.797
PI	1 1/8	1 1/4	2 5/8	3 1/2	7/8	5/8	1/4	0.836
PK	1	1 1/8	2 5/8	3 1/2	7/8	5/8	1/4	0.872
PL	7/8	1	2 5/8	3 1/2	7/8	5/8	1/4	0.903
PM	3/4	7/8	2 5/8	3 1/2	7/8	5/8	1/4	0.930

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Thick- ness in inches.	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4	4 1/2	4 3/4
3-16	.638	.797	.957	1.11	1.28	1.44	1.59	1.75	1.91	2.07	2.23	2.39	2.55	2.71	2.87	3.03
1/4	.850	1.06	1.28	1.49	1.70	1.91	2.12	2.34	2.55	2.76	2.98	3.19	3.40	3.61	3.83	4.04
5-16	1.06	1.33	1.59	1.86	2.12	2.39	2.65	2.92	3.19	3.45	3.72	3.99	4.25	4.52	4.78	5.05
3/8	1.28	1.59	1.92	2.23	2.55	2.87	3.19	3.51	3.83	4.15	4.47	4.78	5.10	5.42	5.74	6.06
7-16	1.49	1.86	2.23	2.60	2.98	3.35	3.72	4.09	4.46	4.83	5.20	5.58	5.95	6.32	6.70	7.07
1/2	1.70	2.12	2.55	2.98	3.40	3.83	4.25	4.67	5.10	5.53	5.95	6.38	6.80	7.22	7.65	8.08
9-16	1.92	2.39	2.87	3.35	3.83	4.30	4.78	5.26	5.74	6.22	6.70	7.17	7.65	8.13	8.61	9.09
5/8	2.12	2.65	3.19	3.72	4.25	4.78	5.31	5.84	6.38	6.91	7.44	7.97	8.50	9.03	9.57	10.10
11-16	2.34	2.92	3.51	4.09	4.67	5.26	5.84	6.43	7.02	7.60	8.18	8.76	9.35	9.93	10.52	11.11
3/4	2.55	3.19	3.83	4.47	5.10	5.75	6.38	7.02	7.65	8.29	8.93	9.57	10.20	10.84	11.48	12.12
13-16	2.76	3.45	4.14	4.84	5.53	6.21	6.90	7.60	8.29	8.98	9.67	10.36	11.05	11.74	12.43	13.12
7/8	2.98	3.72	4.47	5.20	5.95	6.69	7.44	8.18	8.93	9.67	10.41	11.16	11.90	12.65	13.39	14.13
15-16	3.19	3.99	4.78	5.58	6.38	7.18	7.97	8.77	9.57	10.36	11.16	11.95	12.75	13.55	14.34	15.14
1	3.40	4.25	5.10	5.95	6.80	7.65	8.50	9.35	10.20	11.05	11.90	12.75	13.60	14.45	15.30	16.15
1 1-16	3.61	4.52	5.42	6.32	7.22	8.13	9.03	9.93	10.84	11.74	12.65	13.55	14.45	15.35	16.26	17.16
1 1/8	3.83	4.78	5.74	6.70	7.65	8.61	9.57	10.52	11.48	12.43	13.39	14.34	15.30	16.26	17.22	18.17
1 3-16	4.04	5.05	6.06	7.07	8.08	9.09	10.10	11.11	12.12	13.12	14.13	15.14	16.15	17.16	18.17	19.18
1 1/4	4.25	5.31	6.38	7.44	8.50	9.57	10.63	11.69	12.75	13.81	14.87	15.94	17.00	18.06	19.13	20.19
1 5-16	4.46	5.58	6.69	7.81	8.93	10.04	11.16	12.27	13.39	14.50	15.62	16.74	17.85	18.96	20.08	21.20
1 1/8	4.67	5.84	7.02	8.18	9.35	10.52	11.69	12.85	14.03	15.20	16.36	17.53	18.70	19.87	21.04	22.21
1 7-16	4.89	6.11	7.34	8.56	9.78	11.00	12.22	13.44	14.66	15.88	17.10	18.33	19.55	20.77	21.99	23.22
1 1/2	5.10	6.38	7.65	8.93	10.20	11.48	12.75	14.03	15.30	16.58	17.85	19.13	20.40	21.68	22.95	24.23

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	5 in. wide	5½ in. wide	5¾ in. wide	6 in. wide	6¼ in. wide	6½ in. wide	6¾ in. wide	7 in. wide	7¼ in. wide	7½ in. wide	7¾ in. wide	8 in. wide	8¼ in. wide	8½ in. wide	8¾ in. wide
3-16	3.19	3.35	3.51	3.83	3.99	4.14	4.30	4.46	4.62	4.78	4.94	5.10	5.26	5.42	5.58
¼	4.25	4.46	4.67	4.89	5.10	5.31	5.74	5.95	6.16	6.36	6.58	6.80	7.01	7.22	7.43
5-16	5.31	5.58	5.84	6.11	6.38	6.64	7.17	7.44	7.70	7.97	8.23	8.50	8.76	9.03	9.29
¾	6.38	6.69	7.02	7.34	7.65	7.97	8.61	8.93	9.25	9.57	9.88	10.20	10.52	10.84	11.16
7-16	7.44	7.81	8.18	8.56	8.93	9.29	10.04	10.41	10.78	11.16	11.53	11.90	12.27	12.64	13.02
½	8.50	8.93	9.35	9.77	10.20	10.63	11.05	11.48	11.90	12.32	12.75	13.18	13.60	14.03	14.47
9-16	9.57	10.04	10.52	11.00	11.48	11.95	12.43	12.91	13.39	13.86	14.34	14.82	15.30	15.78	16.26
⅝	10.63	11.16	11.69	12.22	12.75	13.28	13.81	14.34	14.87	15.40	15.94	16.47	17.00	17.53	18.06
11-16	11.69	12.27	12.85	13.44	14.03	14.61	15.20	15.78	16.36	16.94	17.53	18.12	18.70	19.28	19.86
¾	12.75	13.39	14.03	14.67	15.30	15.94	16.58	17.22	17.85	18.49	19.13	19.77	20.40	21.04	21.68
13-16	13.81	14.50	15.19	15.88	16.58	17.27	17.95	18.65	19.34	20.03	20.72	21.41	22.10	22.79	23.48
⅞	14.87	15.62	16.36	17.10	17.85	18.60	19.34	20.08	20.83	21.57	22.32	23.05	23.80	24.55	25.30
15-16	15.94	16.74	17.53	18.33	19.13	19.92	20.72	21.51	22.32	23.11	23.91	24.70	25.50	26.30	27.10
1	17.00	17.85	18.70	19.55	20.40	21.25	22.10	22.95	23.80	24.65	25.50	26.35	27.20	28.05	28.90
1 1-16	18.06	18.96	19.87	20.77	21.68	22.58	23.48	24.39	25.29	26.19	27.10	28.00	28.90	29.80	30.70
1 ¼	19.13	20.08	21.04	21.99	22.95	23.91	24.87	25.82	26.78	27.73	28.68	29.64	30.60	31.56	32.52
1 3-16	20.19	21.20	22.21	23.22	24.23	25.23	26.24	27.25	28.26	29.27	30.28	31.29	32.30	33.31	34.32
1 ½	21.25	22.32	23.38	24.44	25.50	26.56	27.62	28.69	29.75	30.81	31.88	32.94	34.00	35.06	36.12
1 5-16	22.32	23.43	24.54	25.66	26.78	27.90	29.01	30.12	31.23	32.35	33.48	34.59	35.70	36.81	37.93
1 ¾	23.38	24.54	25.71	26.88	28.05	29.22	30.39	31.56	32.72	33.89	35.06	36.23	37.40	38.57	39.74
1 7-16	24.44	25.66	26.88	28.10	29.33	30.55	31.77	32.99	34.21	35.44	36.66	37.88	39.10	40.32	41.54
1 ¾	25.50	26.78	28.05	29.33	30.60	31.88	33.15	34.43	35.70	36.98	38.26	39.53	40.80	42.08	43.35

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	9	9 1/4	9 1/2	9 3/4	10	10 1/4	10 1/2	10 3/4	11	11 1/4	11 1/2	11 3/4	12	12 1/4	12 1/2	12 3/4	
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	5.74	5.90	6.06	6.22	6.38	6.54	6.70	6.86	7.02	7.17	7.32	7.49	7.66	7.82	7.98	8.13	8.13
1/4	7.65	7.86	8.08	8.29	8.50	8.71	8.92	9.14	9.34	9.57	9.78	10.00	10.20	10.42	10.63	10.84	10.84
5-16	9.56	9.83	10.10	10.36	10.62	10.89	11.16	11.42	11.68	11.95	12.22	12.49	12.76	13.01	13.28	13.55	13.55
3/8	11.48	11.80	12.12	12.44	12.75	13.07	13.39	13.71	14.03	14.35	14.68	14.99	15.30	15.62	15.94	16.26	16.26
7-16	13.40	13.76	14.14	14.51	14.88	15.25	15.62	15.99	16.36	16.74	17.12	17.49	17.86	18.23	18.60	18.97	18.97
1/2	15.30	15.73	16.16	16.58	17.00	17.42	17.85	18.28	18.70	19.13	19.55	19.97	20.40	20.82	21.25	21.67	21.67
9-16	17.22	17.69	18.18	18.65	19.14	19.61	20.08	20.56	21.02	21.51	22.00	22.48	22.96	23.43	23.90	24.39	24.39
5/8	19.13	19.65	20.19	20.72	21.25	21.78	22.32	22.85	23.38	23.91	24.44	24.97	25.50	26.03	26.56	27.09	27.09
11-16	21.04	21.62	22.21	22.79	23.38	23.96	24.54	25.13	25.70	26.30	26.88	27.47	28.06	28.64	29.22	29.80	29.80
3/4	22.96	23.59	24.23	24.86	25.50	26.14	26.78	27.42	28.05	28.68	29.33	29.97	30.60	31.25	31.88	32.52	32.52
13-16	24.86	25.55	26.24	26.94	27.62	28.32	29.00	29.69	30.40	31.08	31.76	32.46	33.15	33.83	34.53	35.22	35.22
7/8	26.78	27.52	28.26	29.01	29.75	30.50	31.24	31.98	32.72	33.47	34.21	34.95	35.70	36.44	37.19	37.93	37.93
15-16	28.69	29.49	30.28	31.08	31.88	32.67	33.48	34.28	35.06	35.86	36.66	37.46	38.25	39.05	39.84	40.64	40.64
1	30.60	31.45	32.30	33.15	34.00	34.85	35.70	36.55	37.40	38.25	39.10	39.95	40.80	41.65	42.50	43.35	43.35
1 1-16	32.52	33.41	34.32	35.22	36.12	37.03	37.92	38.83	39.74	40.64	41.54	42.45	43.35	44.25	45.16	46.06	46.06
1 1/8	34.43	35.38	36.34	37.29	38.25	39.21	40.17	41.12	42.08	43.04	44.00	44.94	45.90	46.86	47.82	48.77	48.77
1 3-16	36.34	37.35	38.36	39.37	40.38	41.39	42.40	43.40	44.42	45.42	46.44	47.45	48.46	49.46	50.46	51.48	51.48
1 1/4	38.26	39.31	40.37	41.44	42.50	43.56	44.63	45.69	46.76	47.82	48.88	49.94	51.00	52.06	53.12	54.19	54.19
1 5-16	40.16	41.28	42.40	43.52	44.64	45.75	46.86	47.97	49.08	50.20	51.32	52.44	53.56	54.67	55.78	56.90	56.90
1 3/8	42.08	43.25	44.41	45.58	46.75	47.92	49.08	50.25	51.42	52.59	53.76	54.93	56.10	57.27	58.44	59.60	59.60
1 7-16	44.00	45.22	46.44	47.66	48.88	50.10	51.32	52.54	53.76	54.99	56.21	57.43	58.65	59.87	61.10	62.32	62.32
1 1/2	45.90	47.18	48.45	49.73	51.00	52.28	53.55	54.83	56.10	57.37	58.65	59.93	61.20	62.48	63.75	65.03	65.03

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	13	13¼	13½	13¾	14	14¼	14½	14¾	15	15¼	15½	15¾	16	16¼	16½	16¾
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	8.28	8.44	8.60	8.76	8.92	9.08	9.24	9.40	9.56	9.72	9.87	10.04	10.20	10.36	10.52	10.68
¼	11.06	11.27	11.48	11.69	11.90	12.11	12.32	12.54	12.75	12.97	13.18	13.39	13.60	13.81	14.02	14.23
5-16	13.81	14.08	14.34	14.61	14.88	15.14	15.40	15.67	15.94	16.21	16.47	16.73	17.00	17.26	17.52	17.79
¾	16.58	16.90	17.22	17.54	17.86	18.18	18.50	18.82	19.14	19.46	19.77	20.09	20.40	20.72	21.04	21.36
7-16	19.34	19.72	20.08	20.46	20.82	21.20	21.57	21.95	22.32	22.70	23.06	23.44	23.80	24.17	24.54	24.91
½	22.10	22.53	22.96	23.38	23.80	24.22	24.64	25.07	25.50	25.93	26.35	26.77	27.20	27.62	28.05	28.47
9-16	24.86	25.34	25.82	26.30	26.78	27.26	27.74	28.22	28.70	29.18	29.66	30.14	30.60	31.08	31.56	32.04
⅝	27.62	28.16	28.68	29.21	29.74	30.27	30.80	31.34	31.88	32.41	32.94	33.47	34.00	34.54	35.06	35.60
11-16	30.39	30.97	31.56	32.14	32.72	33.30	33.88	34.48	35.06	35.66	36.24	36.82	37.40	37.98	38.56	39.14
¾	33.16	33.80	34.44	35.07	35.71	36.35	36.98	37.63	38.26	38.90	39.54	40.17	40.80	41.45	42.08	42.72
13-16	35.91	36.60	37.29	37.98	38.67	39.36	40.05	40.74	41.43	42.12	42.81	43.50	44.20	44.88	45.58	46.27
⅞	38.68	39.42	40.16	40.90	41.65	42.40	43.14	43.88	44.62	45.36	46.10	46.85	47.60	48.35	49.10	49.85
15-16	41.44	42.24	43.03	43.83	44.63	45.43	46.22	47.02	47.82	48.61	49.41	50.21	51.00	51.80	52.60	53.40
1	44.20	45.05	45.90	46.75	47.60	48.45	49.30	50.15	51.00	51.85	52.70	53.55	54.40	55.25	56.10	56.95
1 1-16	46.96	47.87	48.77	49.67	50.57	51.47	52.38	53.29	54.20	55.10	56.00	56.89	57.80	58.70	59.60	60.50
1 ¼	49.72	50.67	51.63	52.59	53.55	54.51	55.46	56.42	57.37	58.33	59.28	60.24	61.20	62.16	63.12	64.08
1 3-16	52.48	53.50	54.50	55.52	56.52	57.54	58.54	59.56	60.56	61.58	62.58	63.60	64.60	65.61	66.62	67.63
1 ½	55.25	56.32	57.38	58.44	59.50	60.56	61.62	62.69	63.76	64.82	65.88	66.94	68.00	69.07	70.14	71.20
1 5-16	58.02	59.14	60.25	61.36	62.47	63.59	64.70	65.82	66.95	68.06	69.18	70.30	71.40	72.51	73.62	74.74
1 ¾	60.77	61.94	63.11	64.28	65.45	66.62	67.79	68.96	70.12	71.29	72.46	73.63	74.80	75.97	77.14	78.31
1 7-16	63.54	64.76	65.98	67.20	68.42	69.65	70.88	72.10	73.32	74.54	75.76	76.98	78.20	79.42	80.64	81.86
1 ⅞	66.30	67.58	68.86	70.13	71.40	72.68	73.96	75.23	76.51	77.78	79.06	80.33	81.60	82.88	84.16	85.43

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	17	17 1/4	17 1/2	17 3/4	18	18 1/4	18 1/2	18 3/4	19	19 1/4	19 1/2	19 3/4	20	20 1/4	20 1/2	20 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	10.84	11.00	11.16	11.32	11.48	11.64	11.80	11.95	12.10	12.26	12.43	12.60	12.76	12.92	13.08	13.24
1/4	14.44	14.65	14.86	15.08	15.30	15.51	15.73	15.95	16.16	16.37	16.58	16.79	17.00	17.21	17.42	17.63
5-16	18.06	18.32	18.58	18.86	19.12	19.38	19.66	19.92	20.20	20.46	20.72	20.98	21.24	21.51	21.78	22.05
3/8	21.68	22.00	22.32	22.64	22.96	23.28	23.60	23.92	24.24	24.56	24.87	25.19	25.50	25.82	26.14	26.46
7-16	25.28	25.67	26.04	26.42	26.79	27.16	27.52	27.90	28.28	28.65	29.01	29.38	29.75	30.12	30.50	30.87
1/2	28.89	29.32	29.75	30.17	30.60	31.03	31.46	31.88	32.31	32.73	33.15	33.57	34.00	34.42	34.84	35.26
9-16	32.52	33.00	33.48	33.96	34.44	34.91	35.38	35.86	36.34	36.82	37.30	37.78	38.27	38.76	39.23	39.69
5/8	36.12	36.65	37.18	37.72	38.25	38.78	39.31	39.84	40.37	40.90	41.43	41.96	42.50	43.03	43.56	44.10
11-16	39.72	40.31	40.90	41.49	42.08	42.66	43.24	43.83	44.42	45.00	45.58	46.16	46.74	47.32	47.92	48.50
3/4	43.36	44.00	44.64	45.28	45.92	46.55	47.18	47.82	48.46	49.10	49.73	50.36	51.00	51.64	52.28	52.92
13-16	46.96	47.65	48.34	49.03	49.72	50.41	51.10	51.79	52.48	53.18	53.87	54.56	55.25	55.94	56.64	57.33
7/8	50.60	51.34	52.08	52.82	53.56	54.30	55.04	55.78	56.52	57.26	58.01	58.76	59.50	60.25	61.00	61.75
15-16	54.20	55.00	55.79	56.58	57.38	58.18	58.98	59.78	60.57	61.36	62.16	62.96	63.76	64.56	65.36	66.16
1	57.80	58.65	59.50	60.35	61.20	62.05	62.90	63.75	64.60	65.45	66.30	67.15	68.00	68.85	69.70	70.55
1 1-16	61.40	62.30	63.21	64.12	65.02	65.92	66.82	67.73	68.61	69.55	70.45	71.35	72.25	73.15	74.05	74.95
1 1/8	65.04	66.00	66.95	67.90	68.85	69.80	70.76	71.72	72.68	73.63	74.58	75.54	76.50	77.46	78.42	79.37
1 3-16	68.64	69.65	70.66	71.67	72.68	73.69	74.70	75.71	76.72	77.72	78.73	79.74	80.75	81.76	82.76	83.77
1 1/4	72.26	73.32	74.38	75.44	76.50	77.56	78.62	79.68	80.74	81.81	82.88	83.94	85.00	86.06	87.12	88.18
1 5-16	75.86	76.98	78.10	79.22	80.33	81.45	82.56	83.68	84.80	85.92	87.04	88.16	89.28	90.39	91.50	92.61
1 3/8	79.48	80.64	81.81	82.98	84.15	85.32	86.49	87.66	88.83	90.00	91.17	92.33	93.50	94.67	95.84	97.01
1 7-16	83.08	84.31	85.54	86.77	88.00	89.21	90.42	91.65	92.88	94.10	95.31	96.52	97.75	98.97	100.18	101.40
1 1/2	86.70	87.98	89.26	90.53	91.80	93.08	94.36	95.62	96.90	98.18	99.46	100.72	102.00	103.28	104.56	105.83

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thickness in inches.	21	21 1/4	21 1/2	21 3/4	22	22 1/4	22 1/2	22 3/4	23	23 1/4	23 1/2	23 3/4	24	24 1/4	24 1/2	24 3/4
3-16	13.40	13.56	13.72	13.88	14.04	14.19	14.34	14.49	14.64	14.81	14.98	15.15	15.32	15.48	15.64	15.80
1/4	17.84	18.06	18.28	18.48	18.69	18.91	19.13	19.34	19.56	19.78	20.00	20.20	20.40	20.62	20.84	21.05
5-16	22.32	22.58	22.84	23.10	23.36	23.63	23.90	24.18	24.44	24.71	24.98	25.25	25.52	25.78	26.03	26.29
3/8	26.78	27.10	27.42	27.74	28.06	28.38	28.70	29.03	29.36	29.67	29.98	30.29	30.60	30.92	31.24	31.56
7-16	31.24	31.61	31.98	32.35	32.72	33.10	33.48	33.86	34.24	34.62	34.98	35.35	35.72	36.09	36.46	36.83
1/2	35.70	36.13	36.56	36.98	37.40	37.83	38.26	38.68	39.10	39.52	39.94	40.37	40.80	41.22	41.64	42.07
9-16	40.16	40.64	41.12	41.58	42.04	42.53	43.02	43.51	44.00	44.48	44.96	45.44	45.92	46.39	46.86	47.33
5/8	44.04	45.17	45.70	46.23	46.76	47.29	47.82	48.35	48.88	49.41	49.94	50.47	51.00	51.53	52.06	52.59
11-16	49.08	49.67	50.26	50.83	51.40	52.00	52.60	53.18	53.76	54.35	54.94	55.53	56.12	56.70	57.28	57.86
3/4	53.56	54.20	54.84	55.47	56.10	56.73	57.36	58.01	58.66	59.30	59.94	60.57	61.20	61.85	62.50	63.13
13-16	58.01	58.69	59.38	60.08	60.79	61.48	62.16	62.85	63.53	64.22	64.91	65.60	66.29	66.98	67.66	68.36
7/8	62.49	63.23	63.97	64.70	65.44	66.19	66.94	67.68	68.43	69.17	69.91	70.65	71.40	72.14	72.88	73.63
15-16	66.96	67.76	68.56	69.34	70.13	70.93	71.72	72.52	73.32	74.12	74.92	75.71	76.50	77.30	78.10	78.89
1	71.40	72.25	73.10	73.95	74.80	75.65	76.50	77.35	78.20	79.05	79.90	80.75	81.60	82.45	83.30	84.15
1 1-16	75.85	76.75	77.66	78.57	79.48	80.38	81.28	82.18	83.08	83.99	84.90	85.80	86.70	87.60	88.50	89.41
1 1/8	80.33	81.28	82.24	83.20	84.16	85.12	86.08	87.03	88.00	88.95	89.89	90.85	91.80	92.76	93.72	94.68
1 3-16	84.79	85.80	86.80	87.81	88.83	89.84	90.84	91.86	92.88	93.89	94.90	95.91	96.92	97.92	98.92	99.92
1 1/4	89.26	90.32	91.38	92.44	93.52	94.58	95.64	96.70	97.76	98.82	99.88	100.94	102.00	103.06	104.12	105.18
1 5-16	93.72	94.83	95.94	97.05	98.16	99.28	100.40	101.52	102.64	103.76	104.88	106.00	107.12	108.23	109.34	110.45
1 3/8	98.17	99.34	100.50	101.67	102.84	104.01	105.18	106.35	107.52	108.69	109.86	111.03	112.20	113.37	114.54	115.71
1 7-16	102.65	103.87	105.08	106.30	107.52	108.75	109.98	111.20	112.42	113.64	114.86	116.08	117.30	118.52	119.74	120.97
1 1/2	107.10	108.38	109.66	110.93	112.20	113.47	114.74	116.02	117.30	118.58	119.86	121.14	122.40	123.68	124.96	126.23

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	25 in. wide	25 1/4 in. wide	25 1/2 in. wide	25 3/4 in. wide	26 in. wide	26 1/4 in. wide	26 1/2 in. wide	26 3/4 in. wide	27 in. wide	27 1/4 in. wide	27 1/2 in. wide	27 3/4 in. wide	28 in. wide	28 1/4 in. wide	28 1/2 in. wide	28 3/4 in. wide
3-16	15.96	16.11	16.26	16.42	16.56	16.71	16.88	17.04	17.20	17.36	17.52	17.68	17.84	18.00	18.16	18.32
1/4	21.26	21.47	21.68	21.90	22.12	22.33	22.54	22.75	22.96	23.17	23.38	23.59	23.80	24.01	24.22	24.43
5-16	26.56	26.83	27.10	27.36	27.62	27.89	28.16	28.42	28.68	28.95	29.22	29.49	29.76	30.02	30.28	30.54
3/8	31.88	32.20	32.52	32.84	33.16	33.48	33.80	34.12	34.44	34.75	35.08	35.40	35.72	36.04	36.36	36.68
7-16	37.20	37.57	37.94	38.31	38.68	39.06	39.44	39.80	40.17	40.54	40.91	41.28	41.65	42.02	42.40	42.77
1/2	42.50	42.92	43.34	43.77	44.20	44.63	45.06	45.49	45.92	46.34	46.76	47.18	47.60	48.02	48.44	48.86
9-16	47.80	48.29	48.78	49.26	49.73	50.20	50.68	51.16	51.64	52.12	52.60	53.08	53.56	54.04	54.52	55.00
5/8	53.12	53.65	54.18	54.71	55.24	55.78	56.31	56.84	57.37	57.90	58.43	58.96	59.49	60.02	60.54	61.07
11-16	58.44	59.02	59.60	60.18	60.78	61.36	61.94	62.52	63.11	63.69	64.28	64.86	65.44	66.02	66.60	67.18
3/4	63.76	64.40	65.04	65.68	66.32	66.96	67.60	68.24	68.88	69.52	70.15	70.79	71.42	72.06	72.70	73.33
13-16	69.06	69.75	70.44	71.14	71.82	72.51	73.20	73.89	74.58	75.27	75.96	76.65	77.34	78.03	78.72	79.41
7/8	74.38	75.12	75.87	76.62	77.36	78.10	78.85	79.59	80.33	81.08	81.81	82.55	83.30	84.05	84.80	85.55
15-16	79.68	80.48	81.28	82.08	82.88	83.68	84.48	85.28	86.07	86.87	87.66	88.46	89.26	90.06	90.86	91.65
1	85.00	85.85	86.70	87.55	88.40	89.25	90.10	90.95	91.80	92.65	93.50	94.35	95.20	96.05	96.90	97.75
1 1-16	90.32	91.22	92.12	93.02	93.92	94.83	95.74	96.64	97.54	98.44	99.34	100.24	101.14	102.04	102.94	103.84
1 1/8	95.64	96.59	97.54	98.49	99.44	100.39	101.34	102.30	103.26	104.22	105.18	106.14	107.10	108.06	109.02	109.97
1 3-16	100.92	101.94	102.96	103.98	104.96	105.98	107.00	108.01	109.01	110.02	111.03	112.04	113.05	114.06	115.07	116.08
1 1/2	106.24	107.31	108.38	109.45	110.50	111.57	112.64	113.70	114.76	115.82	116.88	117.94	119.00	120.06	121.12	122.18
1 5-16	111.56	112.68	113.80	114.91	116.04	117.16	118.28	119.39	120.50	121.61	122.72	123.83	124.94	126.06	127.18	128.29
1 3/8	116.88	118.04	119.20	120.37	121.54	122.71	123.88	125.05	126.22	127.39	128.56	129.73	130.90	132.07	133.24	134.41
1 7-16	122.20	123.42	124.64	125.86	127.08	128.30	129.52	130.74	131.96	133.18	134.40	135.62	136.84	138.07	139.30	140.53
1 1/2	127.50	128.77	130.05	131.33	132.60	133.88	135.16	136.44	137.72	138.99	140.26	141.53	142.80	144.08	145.36	146.64

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	29 in. wide	29 1/4 in. wide	29 1/2 in. wide	29 3/4 in. wide	30 in. wide	30 1/4 in. wide	30 1/2 in. wide	30 3/4 in. wide	31 in. wide	31 1/4 in. wide	31 1/2 in. wide	31 3/4 in. wide	32 in. wide	32 1/4 in. wide	32 1/2 in. wide	32 3/4 in. wide
3-16	18.48	18.64	18.80	18.96	19.12	19.28	19.44	19.60	19.75	19.91	20.08	20.24	20.40	20.56	20.72	20.88
1/4	24.64	24.84	25.05	25.27	25.50	25.73	25.94	26.15	26.36	26.57	26.78	26.99	27.20	27.41	27.62	27.83
5-16	30.80	31.07	31.34	31.61	31.88	32.15	32.42	32.68	32.94	33.20	33.46	33.73	34.00	34.26	34.52	34.78
3/8	37.00	37.32	37.64	37.96	38.28	38.60	38.92	39.23	39.54	39.86	40.18	40.49	40.80	41.12	41.44	41.76
7-16	43.14	43.52	43.90	44.27	44.64	45.02	45.40	45.76	46.12	46.50	46.88	47.24	47.60	47.97	48.34	48.71
1/2	49.28	49.71	50.14	50.57	51.00	51.43	51.86	52.28	52.70	53.12	53.54	53.97	54.40	54.82	55.24	55.68
9-16	55.48	55.96	56.44	56.92	57.40	57.88	58.36	58.84	59.32	59.80	60.28	60.75	61.22	61.69	62.17	62.65
5/8	61.60	62.14	62.68	63.22	63.76	64.29	64.82	65.35	65.88	66.41	66.94	67.47	68.00	68.54	69.08	69.60
11-16	67.77	68.36	68.95	69.54	70.13	70.72	71.31	71.90	72.48	73.06	73.64	74.22	74.80	75.38	75.96	76.54
3/4	73.97	74.61	75.25	75.89	76.53	77.17	77.81	78.45	79.08	79.71	80.34	80.97	81.61	82.25	82.89	83.53
13-16	80.10	80.79	81.48	82.17	82.86	83.55	84.24	84.93	85.62	86.31	87.00	87.70	88.39	89.08	89.77	90.46
7/8	86.29	87.04	87.77	88.50	89.24	89.98	90.72	91.46	92.20	92.95	93.70	94.45	95.20	95.95	96.70	97.45
15-16	92.44	93.24	94.04	94.84	95.64	96.43	97.22	98.02	98.82	99.62	100.42	101.21	102.00	102.80	103.60	104.40
1	98.60	99.45	100.30	101.15	102.00	102.85	103.70	104.55	105.40	106.25	107.10	107.95	108.80	109.65	110.50	111.35
1 1-16	104.75	105.65	106.55	107.46	108.38	109.28	110.19	111.10	112.00	112.90	113.79	114.69	115.59	116.49	117.40	118.20
1 1/8	110.92	111.88	112.84	113.79	114.74	115.70	116.66	117.62	118.56	119.52	120.48	121.44	122.40	123.36	124.32	125.28
1 3-16	117.09	118.10	119.11	120.12	121.13	122.14	123.15	124.16	125.16	126.18	127.20	128.21	129.21	130.22	131.22	132.23
1 1/4	123.24	124.32	125.38	126.44	127.51	128.57	129.64	130.70	131.76	132.82	133.88	134.94	136.00	137.07	138.14	139.21
1 5-16	129.40	130.52	131.64	132.76	133.89	135.01	136.12	137.24	138.36	139.48	140.60	141.70	142.81	143.92	145.02	146.13
1 3/8	135.58	136.75	137.92	139.08	140.24	141.41	142.58	143.75	144.92	146.09	147.26	148.43	149.60	150.77	151.94	153.11
1 7-16	141.76	142.98	144.20	145.42	146.64	147.86	149.08	150.30	151.52	152.74	153.96	155.18	156.40	157.62	158.84	160.06
1 1/2	147.92	149.19	150.46	151.74	153.02	154.29	155.56	156.83	158.11	159.38	160.66	161.93	163.20	164.47	165.76	167.04

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thickness in inches.	33	33 1/4	33 1/2	33 3/4	34	34 1/4	34 1/2	34 3/4	35	35 1/4	35 1/2	35 3/4	36	36 1/4	36 1/2	36 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	21.04	21.20	21.36	21.52	21.68	21.84	22.00	22.16	22.32	22.48	22.64	22.80	22.96	23.12	23.28	23.44
1/4	28.04	28.25	28.46	28.67	28.88	29.09	29.30	29.51	29.72	29.94	30.16	30.37	30.59	30.81	31.02	31.24
5-16	35.04	35.31	35.58	35.85	36.12	36.38	36.64	36.90	37.16	37.44	37.72	37.98	38.24	38.50	38.76	39.03
3/8	42.08	42.40	42.72	43.04	43.36	43.68	44.00	44.32	44.64	44.96	45.28	45.60	45.92	46.24	46.56	46.88
7-16	49.08	49.45	49.82	50.19	50.57	50.95	51.33	51.70	52.07	52.45	52.83	53.20	53.58	53.95	54.32	54.68
1/2	56.10	56.52	56.94	57.36	57.78	58.21	58.64	59.07	59.50	59.92	60.34	60.76	61.20	61.63	62.06	62.49
9-16	63.12	63.60	64.08	64.56	65.04	65.52	66.00	66.48	66.96	67.44	67.92	68.40	68.88	69.36	69.82	70.29
5/8	70.13	70.66	71.19	71.72	72.24	72.77	73.30	73.83	74.36	74.89	75.43	75.96	76.50	77.03	77.56	78.09
11-16	77.12	77.70	78.28	78.86	79.44	80.03	80.61	81.20	81.79	82.38	82.97	83.55	84.15	84.74	85.32	85.90
3/4	84.16	84.80	85.44	86.08	86.72	87.36	88.00	88.64	89.28	89.92	90.56	91.20	91.84	92.47	93.10	93.73
13-16	91.15	91.84	92.53	93.22	93.91	94.60	95.30	95.99	96.68	97.37	98.06	98.75	99.44	100.13	100.82	101.51
7/8	98.20	98.95	99.70	100.45	101.20	101.95	102.69	103.43	104.16	104.90	105.64	106.39	107.12	107.86	108.60	109.34
15-16	105.20	106.00	106.80	107.60	108.40	109.20	110.00	110.80	111.59	112.38	113.17	113.97	114.76	115.56	116.36	117.16
1	112.20	113.05	113.90	114.75	115.60	116.45	117.30	118.15	119.00	119.85	120.70	121.55	122.40	123.25	124.10	124.95
1 1-16	119.20	120.10	121.00	121.90	122.80	123.70	124.60	125.51	126.42	127.33	128.24	129.14	130.04	130.94	131.84	132.74
1 1/8	126.24	127.20	128.16	129.12	130.08	131.04	132.00	132.95	133.90	134.85	135.80	136.75	137.70	138.65	139.60	140.56
1 3-16	133.24	134.25	135.26	136.27	137.28	138.29	139.30	140.31	141.32	142.33	143.34	144.35	145.36	146.37	147.38	148.39
1 1/4	140.28	141.34	142.40	143.46	144.52	145.58	146.64	147.70	148.76	149.82	150.88	151.94	153.00	154.06	155.12	156.18
1 5-16	147.24	148.36	149.48	150.60	151.72	152.84	153.96	155.08	156.20	157.32	158.44	159.56	160.66	161.78	162.90	164.01
1 3/8	154.28	155.45	156.62	157.79	158.96	160.12	161.28	162.45	163.62	164.79	165.96	167.13	168.30	169.47	170.64	171.81
1 7-16	161.28	162.50	163.72	164.94	166.16	167.39	168.62	169.85	171.08	172.31	173.54	174.77	176.00	177.21	178.42	179.63
1 1/2	168.32	169.59	170.86	172.13	173.40	174.68	175.95	177.23	178.51	179.78	181.06	182.33	183.60	184.88	186.16	187.44

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thickness in inches.	37	37 1/4	37 1/2	37 3/4	38	38 1/4	38 1/2	38 3/4	39	39 1/4	39 1/2	39 3/4	40	40 1/4	40 1/2	40 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	23.60	23.76	23.90	24.04	24.20	24.36	24.52	24.69	24.86	25.03	25.20	25.36	25.52	25.68	25.84	26.00
1/4	31.46	31.68	31.90	32.11	32.32	32.53	32.74	32.95	33.16	33.37	33.58	33.79	34.00	34.21	34.42	34.63
5-16	39.31	39.57	39.84	40.11	40.39	40.65	40.92	41.18	41.44	41.70	41.96	42.22	42.48	42.74	43.01	43.28
3/8	47.20	47.52	47.84	48.16	48.48	48.80	49.12	49.43	49.74	50.06	50.38	50.69	51.00	51.32	51.64	51.96
7-16	55.04	55.42	55.80	56.18	56.56	56.93	57.30	57.66	58.02	58.39	58.76	59.13	59.50	59.87	60.24	60.62
1/2	62.92	63.34	63.76	64.19	64.62	65.04	65.46	65.88	66.30	66.72	67.14	67.56	68.00	68.42	68.84	69.26
9-16	70.76	71.24	71.72	72.20	72.68	73.16	73.64	74.12	74.60	75.08	75.56	76.05	76.54	77.03	77.52	78.00
5/8	78.62	79.15	79.68	80.21	80.74	81.27	81.80	82.33	82.86	83.39	83.92	84.46	85.00	85.53	86.06	86.59
11-16	86.48	87.07	87.66	88.25	88.84	89.42	90.00	90.58	91.16	91.75	92.34	92.91	93.48	94.06	94.64	95.23
3/4	94.36	95.00	95.64	96.28	96.92	97.56	98.20	98.83	99.46	100.09	100.72	101.36	102.00	102.64	103.28	103.92
13-16	102.20	102.89	103.58	104.27	104.96	105.66	106.36	107.05	107.74	108.43	109.12	109.81	110.50	111.19	111.88	112.58
1 1/8	110.08	110.82	111.56	112.30	113.04	113.78	114.52	115.27	116.02	116.77	117.52	118.26	119.00	119.75	120.50	121.25
15-16	117.96	118.76	119.56	120.35	121.14	121.93	122.72	123.52	124.32	125.12	125.92	126.72	127.52	128.32	129.12	129.92
1	125.80	126.65	127.50	128.35	129.20	130.05	130.90	131.75	132.60	133.45	134.30	135.15	136.00	136.85	137.70	138.55
1 1-16	133.64	134.55	135.46	136.37	137.28	138.19	139.10	140.00	140.90	141.80	142.70	143.60	144.50	145.40	146.30	147.20
1 1/4	141.52	142.48	143.44	144.40	145.36	146.31	147.26	148.21	149.16	150.12	151.08	152.04	153.00	153.96	154.92	155.88
1 3-16	149.40	150.41	151.42	152.43	153.44	154.44	155.44	156.46	157.46	158.47	159.48	160.49	161.50	162.51	163.52	164.53
1 1/2	157.24	158.30	159.36	160.42	161.48	162.54	163.62	164.69	165.76	166.82	167.88	168.94	170.00	171.06	172.12	173.18
1 5-16	165.12	166.24	167.36	168.48	169.60	170.72	171.84	172.96	174.08	175.20	176.32	177.44	178.56	179.67	180.78	181.90
1 3/4	172.98	174.15	175.32	176.49	177.66	178.83	180.00	181.17	182.34	183.50	184.66	185.83	187.00	188.17	189.34	190.51
1 7-16	180.85	182.07	183.20	184.52	185.75	186.97	188.20	189.42	190.63	191.84	193.05	194.27	195.50	196.72	197.94	199.16
1 7/8	188.72	190.00	191.25	192.52	193.80	195.08	196.36	197.64	198.92	200.18	201.44	202.72	204.00	205.28	206.56	207.84

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	41 in. wide	41½ in. wide	41¾ in. wide	42 in. wide	42¼ in. wide	42½ in. wide	42¾ in. wide	43 in. wide	43¼ in. wide	43½ in. wide	43¾ in. wide	44 in. wide	44¼ in. wide	44½ in. wide	44¾ in. wide
3-16	26.16	26.32	26.48	26.64	26.96	27.12	27.28	27.44	27.60	27.76	27.92	28.08	28.23	28.38	28.53
¼	34.84	35.05	35.26	35.68	35.90	36.12	36.34	36.56	36.76	36.96	37.17	37.38	37.60	37.82	38.04
5-16	43.55	43.82	44.09	44.36	44.64	45.16	45.42	45.68	45.94	46.20	46.46	46.72	46.99	47.26	47.53
¾	52.28	52.60	52.92	53.24	53.56	54.20	54.52	54.84	55.16	55.48	55.80	56.12	56.44	56.76	57.08
7-16	61.00	61.37	61.74	62.11	62.48	63.22	63.59	63.96	64.33	64.70	65.07	65.44	65.82	66.20	66.58
½	69.68	70.10	70.52	70.96	71.40	71.83	72.26	72.69	73.12	73.54	73.96	74.38	75.23	75.66	76.09
9-16	78.46	78.92	79.38	79.85	80.32	80.80	81.28	81.76	82.24	82.70	83.16	83.62	84.09	84.57	85.05
⅝	87.12	87.66	88.20	88.74	89.28	89.81	90.34	90.87	91.40	91.93	92.46	92.99	93.52	94.05	94.58
11-16	95.83	96.41	97.00	97.58	98.16	98.75	99.34	99.93	100.52	101.09	101.66	102.23	102.81	103.40	104.00
¾	104.56	105.20	105.84	106.48	107.12	107.76	108.40	109.04	109.68	110.31	110.94	111.57	112.20	112.83	113.46
13-16	113.28	113.97	114.66	115.34	116.02	116.70	117.38	118.07	118.76	119.46	120.16	120.86	121.56	122.26	122.96
⅞	122.00	122.75	123.50	124.24	124.98	125.73	126.47	127.21	127.94	128.67	129.41	130.15	130.89	131.63	132.38
15-16	130.72	131.52	132.32	133.12	133.92	134.72	135.52	136.32	137.11	137.90	138.69	139.48	140.27	141.06	141.86
1	139.40	140.25	141.10	141.95	142.80	143.65	144.50	145.35	146.20	147.05	147.90	148.75	149.60	150.45	151.30
1 1-16	148.10	149.00	149.90	150.80	151.70	152.60	153.50	154.41	155.32	156.23	157.14	158.05	158.96	159.86	160.76
1 ¼	156.84	157.79	158.74	159.70	160.66	161.61	162.56	163.52	164.48	165.44	166.40	167.36	168.32	169.28	170.24
1 3-16	165.53	166.54	167.54	168.56	169.58	170.59	171.60	172.60	173.60	174.61	175.62	176.64	177.66	178.67	179.68
1 ½	174.24	175.30	176.36	177.44	178.52	179.58	180.64	181.70	182.76	183.82	184.88	185.96	187.04	188.10	189.16
1 5-16	183.00	184.11	185.22	186.33	187.44	188.55	189.66	190.77	191.88	192.99	194.10	195.21	196.32	197.44	198.56
1 ¾	191.68	192.85	194.02	195.18	196.34	197.51	198.68	199.84	201.00	202.17	203.34	204.51	205.68	206.85	208.02
1 7-16	200.37	201.59	202.81	204.05	205.29	206.52	207.75	208.96	210.17	211.38	212.60	213.82	215.04	216.27	217.50
1 ⅞	209.12	210.39	211.66	212.93	214.20	215.48	216.76	218.04	219.32	220.59	221.86	223.13	224.40	225.67	226.94

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	45 in. wide	45½ in. wide	45¾ in. wide	46 in. wide	46¼ in. wide	46½ in. wide	46¾ in. wide	47 in. wide	47¼ in. wide	47½ in. wide	47¾ in. wide	48 in. wide	48¼ in. wide	48½ in. wide	
3-16	28.68	28.83	28.98	29.14	29.29	29.45	29.62	29.79	30.13	30.30	30.47	30.64	30.80	30.96	31.12
¼	38.26	38.47	38.68	38.89	39.11	39.33	39.55	39.77	40.20	40.40	40.60	40.80	41.02	41.24	41.46
5-16	47.80	48.07	48.35	48.62	48.88	49.15	49.42	49.69	50.23	50.50	50.77	51.04	51.30	51.56	51.81
¾	57.40	57.73	58.06	58.38	58.71	59.02	59.34	59.65	60.27	60.58	60.89	61.20	61.52	61.84	62.16
7-16	66.96	67.34	67.72	68.10	68.47	68.85	69.23	69.59	70.33	70.70	71.07	71.44	71.81	72.18	72.55
½	76.52	76.94	77.36	77.78	78.20	78.62	79.04	79.46	80.31	80.74	81.17	81.60	82.02	82.44	82.86
9-16	86.03	86.52	87.01	87.51	88.00	88.48	88.96	89.44	90.40	90.88	91.36	91.84	92.31	92.78	93.25
⅝	95.64	96.17	96.70	97.23	97.76	98.29	98.82	99.35	100.41	100.94	101.47	102.00	102.53	103.06	103.59
11-16	105.19	105.78	106.37	106.96	107.53	108.11	108.70	109.29	110.47	111.06	111.65	112.24	112.82	113.40	113.98
¾	114.73	115.37	116.01	116.65	117.31	117.95	118.60	119.24	119.88	120.51	121.14	121.77	122.40	123.05	123.70
13-16	124.33	125.02	125.71	126.39	127.06	127.75	128.44	129.13	129.82	130.51	131.20	131.89	132.58	133.27	133.96
⅞	133.88	134.62	135.36	136.10	136.86	137.60	138.34	139.08	139.82	140.56	141.30	142.05	142.80	143.54	144.28
15-16	143.44	144.24	145.04	145.84	146.64	147.44	148.24	149.04	149.84	150.63	151.42	152.21	153.00	153.80	154.60
1	153.00	153.85	154.70	155.55	156.40	157.25	158.10	158.95	159.80	160.65	161.50	162.35	163.20	164.05	164.90
1 1-16	162.56	163.46	164.36	165.26	166.16	167.07	167.98	168.89	169.80	170.70	171.60	172.50	173.40	174.30	175.20
1 ¼	172.16	173.11	174.06	175.02	175.99	176.94	177.90	178.84	179.78	180.74	181.70	182.65	183.60	184.56	185.52
1 3-16	181.68	182.70	183.72	184.74	185.76	186.77	187.78	188.79	189.80	190.81	191.82	192.83	193.84	194.84	195.84
1 ½	191.28	192.34	193.40	194.46	195.52	196.58	197.64	198.70	199.76	200.82	201.88	202.94	204.00	205.06	206.12
1 5-16	200.80	201.92	203.04	204.16	205.28	206.40	207.52	208.64	209.76	210.88	212.00	213.12	214.24	215.35	216.46
1 ¾	210.36	211.53	212.70	213.87	215.04	216.21	217.38	218.55	219.72	220.89	222.06	223.23	224.40	225.57	226.74
1 7-16	219.96	221.18	222.40	223.62	224.84	226.06	227.28	228.50	229.72	230.94	232.16	233.38	234.60	235.82	237.04
1 ¾	229.48	230.76	232.04	233.32	234.60	235.88	237.16	238.44	239.72	241.00	242.28	243.54	244.80	246.08	247.36

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	49	49 1/4	49 1/2	49 3/4	50	50 1/4	50 1/2	50 3/4	51	51 1/4	51 1/2	51 3/4	52	52 1/4	52 1/2	52 3/4
3-16	31.28	31.44	31.60	31.76	31.92	32.07	32.22	32.38	32.52	32.68	32.84	32.98	33.12	33.27	33.42	33.59
1/4	41.68	41.89	42.10	42.31	42.52	42.73	42.94	43.15	43.36	43.58	43.80	44.02	44.24	44.45	44.66	44.87
5-16	52.06	52.32	52.58	52.85	53.12	53.39	53.66	53.93	54.20	54.46	54.72	54.98	55.24	55.51	55.78	56.05
3/8	62.48	62.80	63.12	63.44	63.76	64.08	64.40	64.72	65.04	65.36	65.68	66.00	66.32	66.64	66.96	67.28
7-16	72.92	73.29	73.66	74.03	74.40	74.77	75.12	75.51	75.88	76.25	76.62	76.99	77.37	77.75	78.12	78.50
1/2	83.28	83.71	84.14	84.57	85.00	85.42	85.84	86.26	86.68	87.11	87.54	87.97	88.40	88.83	89.26	89.69
9-16	93.72	94.19	94.66	95.13	95.60	96.09	96.58	97.06	97.56	98.05	98.54	99.00	99.46	99.93	100.40	100.88
5/8	104.12	104.65	105.18	105.71	106.24	106.77	107.30	107.83	108.36	108.89	109.42	109.95	110.48	111.02	111.56	112.09
11-16	114.56	115.14	115.72	116.30	116.88	117.46	118.04	118.62	119.20	119.78	120.36	120.96	121.56	122.14	122.72	123.30
3/4	125.00	125.63	126.26	126.89	127.52	128.16	128.80	129.44	130.08	130.72	131.36	132.00	132.64	133.28	133.92	134.56
13-16	135.32	136.02	136.72	137.42	138.12	138.81	139.50	140.19	140.88	141.58	142.28	142.96	143.64	144.33	145.02	145.71
7/8	145.76	146.51	147.26	148.01	148.76	149.50	150.24	150.99	151.74	152.49	153.24	153.98	154.72	155.46	156.20	156.95
15-16	156.20	156.99	157.78	158.57	159.36	160.16	160.96	161.76	162.56	163.36	164.16	164.96	165.76	166.56	167.36	168.16
1	166.60	167.45	168.30	169.15	170.00	170.85	171.70	172.55	173.40	174.25	175.10	175.95	176.80	177.65	178.50	179.35
1 1-16	177.00	177.91	178.82	179.73	180.64	181.54	182.44	183.34	184.24	185.14	186.04	186.94	187.84	188.75	189.66	190.57
1 1/8	187.44	188.40	189.36	190.32	191.28	192.23	193.18	194.13	195.08	196.03	196.98	197.93	198.88	199.83	200.78	201.73
1 3-16	197.84	198.84	199.84	200.84	201.84	202.85	203.87	204.89	205.91	206.93	207.95	208.93	209.92	210.94	211.96	212.98
1 1/4	208.24	209.30	210.36	211.42	212.48	213.55	214.62	215.69	216.76	217.83	218.90	219.95	221.00	222.07	223.14	224.21
1 5-16	218.68	219.79	220.90	222.01	223.12	224.24	225.36	226.48	227.60	228.71	229.82	230.95	232.08	233.20	234.32	235.44
1 3/8	229.08	230.25	231.42	232.59	233.76	234.91	236.08	237.25	238.41	239.58	240.74	241.91	243.08	244.25	245.42	246.59
1 7-16	239.48	240.71	241.94	243.17	244.40	245.62	246.84	248.06	249.28	250.50	251.72	252.94	254.16	255.38	256.60	257.82
1 1/2	249.92	251.19	252.46	253.73	255.00	256.27	257.54	258.81	260.10	261.38	262.66	263.93	265.20	266.48	267.76	269.04

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	53	53 1/4	53 1/2	53 3/4	54	54 1/4	54 1/2	54 3/4	55	55 1/4	55 1/2	55 3/4	56	56 1/4	56 1/2	56 3/4
3-16	33.76	33.92	34.08	34.24	34.40	34.56	34.72	34.88	35.04	35.20	35.36	35.52	35.68	35.84	36.00	36.16
1/4	45.08	45.29	45.50	45.71	45.92	46.13	46.34	46.55	46.76	46.97	47.18	47.39	47.60	47.81	48.02	48.23
5-16	56.32	56.58	56.84	57.10	57.36	57.63	57.90	58.17	58.44	58.71	58.98	59.24	59.51	59.78	60.04	60.30
3/8	67.60	67.92	68.24	68.56	68.88	69.19	69.51	69.83	70.15	70.47	70.79	71.12	71.44	71.76	72.08	72.40
7-16	78.88	79.24	79.60	79.97	80.34	80.71	81.08	81.45	81.82	82.19	82.56	82.93	83.30	83.67	84.04	84.42
1/2	90.12	90.55	90.98	91.41	91.84	92.26	92.68	93.10	93.52	93.94	94.36	94.78	95.20	95.62	96.04	96.46
9-16	101.36	101.84	102.32	102.80	103.28	103.76	104.24	104.72	105.20	105.68	106.16	106.64	107.12	107.60	108.08	108.56
5/8	112.62	113.15	113.68	114.21	114.74	115.27	115.80	116.33	116.86	117.39	117.92	118.45	118.98	119.51	120.04	120.56
11-16	123.88	124.46	125.04	125.63	126.22	126.80	127.38	127.97	128.56	129.14	129.72	130.30	130.88	131.46	132.04	132.62
3/4	135.20	135.84	136.48	137.12	137.76	138.40	139.04	139.67	140.30	140.94	141.58	142.22	142.85	143.48	144.12	144.76
13-16	146.40	147.09	147.78	148.47	149.16	149.85	150.54	151.23	151.92	152.61	153.30	153.99	154.68	155.37	156.06	156.75
7/8	157.70	158.44	159.18	159.92	160.66	161.41	162.16	162.89	163.63	164.36	165.10	165.85	166.60	167.35	168.10	168.85
15-16	168.96	169.76	170.56	171.36	172.15	172.95	173.74	174.53	175.32	176.12	176.92	177.72	178.52	179.32	180.12	180.92
1	180.20	181.05	181.90	182.75	183.60	184.45	185.30	186.15	187.00	187.85	188.70	189.55	190.40	191.25	192.10	192.95
1 1-16	191.48	192.38	193.28	194.18	195.08	195.98	196.88	197.78	198.68	199.58	200.48	201.38	202.28	203.18	204.08	204.98
1 1/8	202.68	203.64	204.60	205.56	206.52	207.48	208.44	209.40	210.36	211.32	212.28	213.24	214.20	215.16	216.12	217.08
1 3-16	214.00	215.01	216.02	217.02	218.02	219.03	220.04	221.05	222.06	223.07	224.08	225.09	226.10	227.11	228.12	229.13
1 1/4	225.28	226.34	227.40	228.46	229.52	230.58	231.64	232.70	233.76	234.82	235.88	236.94	238.00	239.06	240.12	241.18
1 5-16	236.56	237.67	238.78	239.89	241.00	242.11	243.22	244.33	245.44	246.55	247.66	248.77	249.88	251.00	252.12	253.24
1 1/2	247.76	248.93	250.10	251.27	252.44	253.61	254.78	255.95	257.12	258.29	259.46	260.63	261.80	262.97	264.14	265.31
1 7-16	259.04	260.26	261.48	262.70	263.92	265.14	266.36	267.58	268.80	270.02	271.24	272.46	273.68	274.91	276.14	277.37
1 1/8	270.32	271.60	272.88	274.16	275.44	276.71	277.98	279.25	280.52	281.79	283.06	284.33	285.60	286.88	288.16	289.44

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	57	57 1/4	57 1/2	57 3/4	58	58 1/4	58 1/2	58 3/4	59	59 1/4	59 1/2	59 3/4	60	60 1/4	60 1/2	60 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	36.32	36.48	36.64	36.80	36.96	37.12	37.28	37.44	37.60	37.76	37.92	38.08	38.24	38.40	38.56	38.72
1/4	48.44	48.65	48.86	49.07	49.28	49.48	49.68	49.89	50.10	50.31	50.54	50.77	51.00	51.23	51.46	51.68
5-16	60.56	60.82	61.08	61.34	61.60	61.87	62.14	62.41	62.68	62.95	63.22	63.49	63.76	64.03	64.30	64.57
3/8	72.72	73.04	73.36	73.68	74.00	74.32	74.64	74.96	75.28	75.60	75.92	76.24	76.56	76.88	77.20	77.52
7-16	84.80	85.17	85.54	85.91	86.28	86.66	87.04	87.42	87.80	88.17	88.54	88.91	89.28	89.66	90.04	90.42
1/2	96.88	97.30	97.72	98.14	98.56	98.99	99.42	99.85	100.28	100.71	101.14	101.57	102.00	102.43	102.86	103.29
9-16	109.04	109.52	110.00	110.48	110.96	111.44	111.92	112.40	112.88	113.36	113.84	114.32	114.80	115.28	115.76	116.24
5/8	121.08	121.61	122.14	122.67	123.20	123.74	124.28	124.82	125.36	125.90	126.44	126.98	127.52	128.05	128.58	129.11
11-16	133.20	133.78	134.36	134.95	135.54	136.13	136.72	137.31	137.90	138.49	139.08	139.67	140.26	140.85	141.44	142.03
3/4	145.40	146.03	146.66	147.30	147.94	148.58	149.22	149.86	150.50	151.14	151.78	152.42	153.06	154.70	155.34	155.98
13-16	157.44	158.13	158.82	159.51	160.20	160.89	161.58	162.27	162.96	163.65	164.34	165.03	165.72	166.41	167.10	167.79
7/8	169.60	170.35	171.10	171.84	172.58	173.33	174.08	174.81	175.54	176.27	177.01	177.75	178.48	179.22	179.96	180.70
15-16	181.72	182.51	183.30	184.09	184.88	185.68	186.48	187.28	188.08	188.88	189.68	190.48	191.28	192.07	192.86	193.65
1	193.80	194.65	195.50	196.35	197.20	198.05	198.90	199.75	200.60	201.45	202.30	203.15	204.00	204.85	205.70	206.55
1 1-16	205.88	206.78	207.68	208.59	209.50	210.40	211.30	212.20	213.10	214.01	214.92	215.84	216.76	217.66	218.56	219.47
1 1/8	218.04	218.99	219.94	220.89	221.84	222.80	223.76	224.72	225.68	226.63	227.58	228.53	229.48	230.44	231.40	232.35
1 3-16	230.14	231.15	232.16	233.17	234.18	235.19	236.20	237.21	238.22	239.23	240.24	241.25	242.26	243.27	244.28	245.29
1 1/4	242.24	243.30	244.36	245.42	246.48	247.56	248.64	249.70	250.76	251.82	252.88	253.95	255.02	256.08	257.14	258.21
1 5-16	254.36	255.47	256.58	257.69	258.80	260.02	261.04	262.16	263.28	264.40	265.52	266.65	267.78	268.90	270.02	271.14
1 3/8	266.48	267.65	268.82	269.99	271.16	272.33	273.50	274.67	275.84	277.00	278.16	279.32	280.48	281.65	282.82	283.99
1 7-16	278.60	279.83	281.06	282.29	283.52	284.74	285.96	287.18	288.40	289.62	290.84	292.06	293.28	294.50	295.72	296.94
1 1/2	290.72	292.00	293.28	294.56	295.84	297.11	298.38	299.65	300.92	302.20	303.48	304.76	306.04	307.31	308.58	309.86

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	61 in. wide	61¼ in. wide	61½ in. wide	61¾ in. wide	62 in. wide	62¼ in. wide	62½ in. wide	62¾ in. wide	63 in. wide	63¼ in. wide	63½ in. wide	63¾ in. wide	64 in. wide	64¼ in. wide	64½ in. wide	64¾ in. wide
3-16	38.88	39.04	39.20	39.35	39.50	39.66	39.82	39.99	40.16	40.32	40.48	40.64	40.80	40.96	41.12	41.28
¼	51.88	52.09	52.30	52.51	52.72	52.93	53.14	53.35	53.56	53.77	53.98	54.19	54.40	54.61	54.82	55.03
5-16	64.84	65.10	65.36	65.62	65.88	66.14	66.40	66.66	66.92	67.19	67.46	67.73	68.00	68.26	68.52	68.78
¾	77.84	78.15	78.46	78.77	79.08	79.40	79.72	80.04	80.36	80.67	80.98	81.29	81.60	81.92	82.24	82.56
7-16	90.80	91.16	91.52	91.88	92.24	92.62	93.00	93.38	93.75	94.12	94.48	94.84	95.20	95.57	95.94	96.31
½	103.72	104.14	104.56	104.98	105.40	105.82	106.24	106.66	107.08	107.51	107.94	108.33	108.80	109.22	109.64	110.06
9-16	116.72	117.20	117.68	118.16	118.64	119.12	119.60	120.08	120.56	121.03	121.50	121.97	122.44	122.91	123.38	123.86
¾	129.64	130.17	130.70	131.23	131.76	132.29	132.82	133.35	133.88	134.41	134.94	135.47	136.00	136.54	137.08	137.62
11-16	142.62	143.21	143.80	144.38	144.96	145.54	146.12	146.70	147.28	147.86	148.44	149.02	149.60	150.18	150.76	151.34
¾	155.62	156.26	156.90	157.53	158.16	158.79	159.42	160.05	160.68	161.31	161.94	162.58	163.22	163.86	164.50	165.14
13-16	168.48	169.17	169.86	170.55	171.24	171.93	172.62	173.31	174.00	174.70	175.40	176.09	176.78	177.47	178.16	178.85
¾	181.44	182.18	182.92	183.66	184.40	185.15	185.90	186.65	187.40	188.15	188.90	189.65	190.40	191.15	191.90	192.65
15-16	194.44	195.22	196.04	196.84	197.64	198.44	199.24	200.04	200.84	201.64	202.43	203.22	204.01	204.81	205.60	206.40
1	207.40	208.25	209.10	209.95	210.80	211.65	212.50	213.35	214.20	215.05	215.90	216.75	217.60	218.45	219.30	220.15
1 1-16	220.38	221.29	222.20	223.10	224.00	224.90	225.80	226.69	227.58	228.48	229.38	230.28	231.18	232.08	232.98	233.89
1 ½	233.32	234.23	235.24	236.18	237.12	238.08	239.04	240.00	240.96	241.92	242.88	243.84	244.80	245.76	246.72	247.68
1 3-16	246.30	247.31	248.32	249.32	250.32	251.34	252.36	253.38	254.40	255.41	256.42	257.42	258.42	259.43	260.44	261.44
1 ¼	259.28	260.34	261.40	262.46	263.52	264.58	265.64	266.70	267.76	268.82	269.88	270.94	272.00	273.07	274.14	275.21
1 5-16	272.24	273.36	274.48	275.60	276.72	277.84	278.96	280.08	281.20	282.30	283.40	284.51	285.62	286.73	287.84	288.94
1 ¾	285.16	286.33	287.50	288.67	289.84	291.01	292.18	293.35	294.52	295.69	296.86	298.03	299.20	300.37	301.54	302.71
1 7-16	298.16	299.38	300.60	301.82	303.04	304.26	305.48	306.70	307.92	309.14	310.36	311.58	312.80	314.02	315.24	316.46
1 ½	311.12	312.39	313.66	314.94	316.22	317.49	318.76	320.04	321.32	322.59	323.86	325.13	326.40	327.67	328.94	330.23

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	65 in. wide	65¼ in. wide	65½ in. wide	65¾ in. wide	66 in. wide	66¼ in. wide	66½ in. wide	66¾ in. wide	67 in. wide	67¼ in. wide	67½ in. wide	67¾ in. wide	68 in. wide	68¼ in. wide	68½ in. wide	68¾ in. wide
3-16	41.44	41.60	41.76	41.92	42.08	42.24	42.40	42.56	42.72	42.88	43.04	43.20	43.36	43.52	43.68	43.84
¼	55.24	55.45	55.66	55.87	56.08	56.29	56.50	56.71	56.92	57.13	57.34	57.55	57.76	57.97	58.18	58.39
5-16	69.04	69.30	69.56	69.82	70.08	70.35	70.62	70.89	71.16	71.43	71.70	71.97	72.24	72.50	72.76	73.02
¾	82.88	83.20	83.52	83.84	84.16	84.48	84.80	85.12	85.44	85.76	86.08	86.40	86.72	87.04	87.36	87.68
7-16	96.68	97.05	97.42	97.79	98.16	98.53	98.90	99.27	99.64	100.01	100.38	100.76	101.14	101.52	101.90	102.28
½	110.49	110.92	111.35	111.77	112.20	112.62	113.04	113.46	113.88	114.30	114.72	115.14	115.56	115.99	116.42	116.85
9-16	124.34	124.82	125.30	125.78	126.24	126.72	127.20	127.68	128.16	128.64	129.12	129.60	130.08	130.56	131.04	131.52
¾	138.16	138.68	139.20	139.73	140.26	140.79	141.32	141.85	142.38	142.91	143.44	143.96	144.48	145.01	145.54	146.07
11-16	151.92	152.50	153.08	153.64	154.24	154.82	155.40	155.98	156.56	157.14	157.72	158.30	158.88	159.47	160.06	160.64
¾	165.78	166.42	167.06	167.70	168.32	168.96	169.60	170.24	170.88	171.52	172.16	172.80	173.44	174.08	174.72	175.36
13-16	179.54	180.23	180.92	181.61	182.30	182.99	183.68	184.37	185.06	185.75	186.44	187.13	187.82	188.51	189.20	189.90
¾	193.40	194.15	194.90	195.65	196.40	197.15	197.90	198.65	199.40	200.15	200.90	201.65	202.40	203.15	203.90	204.64
15-16	207.20	208.00	208.80	209.60	210.40	211.20	212.00	212.80	213.60	214.40	215.20	216.00	216.80	217.60	218.40	219.20
1	221.00	221.85	222.70	223.55	224.40	225.25	226.10	226.95	227.80	228.65	229.50	230.35	231.20	232.05	232.90	233.75
1 1-16	234.80	235.70	236.60	237.50	238.40	239.30	240.20	241.10	242.00	242.90	243.80	244.70	245.60	246.50	247.40	248.30
1½	248.64	249.60	250.56	251.52	252.48	253.44	254.40	255.36	256.32	257.28	258.24	259.20	260.16	261.12	262.08	263.04
1 3-16	262.44	263.45	264.46	265.47	266.48	267.49	268.50	269.51	270.52	271.53	272.54	273.55	274.56	275.57	276.58	277.59
1¼	276.28	277.35	278.42	279.48	280.56	281.62	282.68	283.74	284.80	285.86	286.92	287.98	289.04	290.10	291.16	292.22
1 5-16	290.04	291.15	292.26	293.38	294.48	295.60	296.72	297.84	298.96	300.08	301.20	302.32	303.44	304.56	305.68	306.80
1¾	303.88	305.05	306.22	307.39	308.56	309.73	310.90	312.07	313.24	314.41	315.58	316.75	317.92	319.08	320.24	321.40
1 7-16	317.68	318.90	320.12	321.34	322.56	323.78	325.00	326.22	327.44	328.66	329.88	331.10	332.32	333.55	334.78	336.01
1½	331.52	332.80	334.08	335.35	336.64	337.91	339.18	340.45	341.72	342.99	344.26	345.53	346.80	348.07	349.36	350.63

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	69 in. wide	69 1/4 in. wide	69 1/2 in. wide	69 3/4 in. wide	70 in. wide	70 1/4 in. wide	70 1/2 in. wide	70 3/4 in. wide	71 in. wide	71 1/4 in. wide	71 1/2 in. wide	71 3/4 in. wide	72 in. wide	72 1/4 in. wide	72 1/2 in. wide	72 3/4 in. wide
3-16	44.00	44.16	44.32	44.48	44.64	44.80	44.96	45.12	45.26	45.44	45.60	45.76	45.92	46.08	46.24	46.40
1/4	58.60	58.81	59.02	59.23	59.44	59.66	59.88	60.10	60.32	60.53	60.74	60.96	61.18	61.40	61.62	61.83
5-16	73.28	73.54	73.80	74.06	74.32	74.59	74.88	75.15	75.44	75.70	75.96	76.22	76.48	76.74	77.00	77.26
3/8	88.00	88.32	88.64	88.96	89.28	89.60	89.92	90.24	90.56	90.88	91.20	91.52	91.84	92.16	92.48	92.80
7-16	102.66	103.03	103.40	103.77	104.14	104.52	104.90	105.27	105.66	106.03	106.40	106.78	107.16	107.54	107.91	108.28
1/2	117.28	117.71	118.14	118.57	119.00	119.42	119.84	120.26	120.68	121.10	121.52	121.96	122.40	122.83	123.26	123.69
9-16	132.00	132.48	132.96	133.44	133.92	134.40	134.88	135.36	135.84	136.32	136.80	137.28	137.76	138.24	138.72	139.18
5/8	146.60	147.13	147.66	148.19	148.72	149.25	149.78	150.32	150.86	151.39	151.92	152.46	153.00	153.53	154.06	154.59
11-16	161.22	161.81	162.40	162.99	163.58	164.17	164.76	165.35	165.94	166.52	167.10	168.70	168.30	168.89	169.48	170.06
3/4	176.00	176.64	177.28	177.92	178.56	179.20	179.84	180.48	181.12	181.76	182.40	183.04	183.68	184.31	184.94	185.57
13-16	190.60	191.29	191.98	192.67	193.36	194.05	194.74	195.43	196.12	196.81	197.50	198.19	198.88	199.57	200.26	200.95
7/8	205.38	206.12	206.86	207.59	208.32	209.06	209.80	210.55	211.29	212.04	212.78	213.51	214.24	214.98	215.72	216.46
15-16	220.00	220.80	221.60	222.39	223.18	223.97	224.76	225.55	226.34	227.14	227.94	228.73	229.52	230.32	231.12	231.92
1	234.60	235.45	236.30	237.15	238.00	238.85	239.70	240.55	241.40	242.25	243.10	243.95	244.80	245.65	246.50	247.35
1 1-16	249.20	250.11	251.02	251.92	252.84	253.75	254.66	255.56	256.48	257.38	258.28	259.18	260.08	260.98	261.88	262.78
1 1/8	264.00	264.95	265.90	266.85	267.80	268.75	269.70	270.65	271.60	272.55	273.50	274.45	275.40	276.35	277.30	278.25
1 3-16	278.60	279.61	280.62	281.63	282.64	283.65	284.66	285.67	286.68	287.69	288.70	289.71	290.72	291.73	292.74	293.75
1 1/4	293.28	294.34	295.40	296.46	297.52	298.58	299.64	300.70	301.76	302.82	303.88	304.94	306.00	307.06	308.12	309.18
1 5-16	307.92	309.04	310.16	311.28	312.40	313.52	314.64	315.76	316.88	318.00	319.12	320.22	321.32	322.44	323.56	324.68
1 3/8	322.56	323.73	324.90	326.07	327.24	328.41	329.58	330.75	331.92	333.09	334.26	335.43	336.60	337.77	338.94	340.11
1 7-16	337.24	338.47	339.70	340.93	342.16	343.39	344.62	345.85	347.08	348.31	349.54	350.77	352.00	353.21	354.42	355.63
1 1/2	351.90	353.18	354.46	355.74	357.02	358.29	359.56	360.84	362.12	363.39	364.66	365.93	367.20	368.48	369.76	371.04

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	73	73 1/4	73 1/2	73 3/4	74	74 1/4	74 1/2	74 3/4	75	75 1/4	75 1/2	75 3/4	76	76 1/4	76 1/2	76 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	46.56	46.72	46.88	47.04	47.20	47.36	47.52	47.66	47.80	47.94	48.08	48.23	48.40	48.56	48.72	48.88
1/4	62.04	62.26	62.48	62.70	62.92	63.14	63.36	63.58	63.80	64.01	64.22	64.44	64.64	64.85	65.06	65.27
5-16	77.52	77.79	78.06	78.34	78.62	78.88	79.14	79.41	79.68	79.95	80.22	80.48	80.78	81.04	81.30	81.57
3/8	93.12	93.44	93.76	94.08	94.40	94.72	95.04	95.36	95.68	96.00	96.32	96.64	96.90	97.28	97.60	97.92
7-16	108.64	109.00	109.36	109.72	110.08	110.46	110.84	111.22	111.60	111.98	112.36	112.73	113.12	113.49	113.86	114.23
1/2	124.12	124.55	124.98	125.41	125.84	126.26	126.68	127.10	127.52	127.94	128.38	128.80	129.24	129.66	130.08	130.50
9-16	139.64	140.11	140.58	141.05	141.52	142.00	142.48	142.96	143.44	143.92	144.40	144.88	145.36	145.84	146.32	146.80
5/8	155.12	155.65	156.18	156.71	157.24	157.77	158.30	158.83	159.36	159.89	160.42	160.95	161.48	162.01	162.54	163.07
11-16	170.64	171.22	171.80	172.38	172.96	173.55	174.14	174.73	175.32	175.91	176.50	177.08	177.68	178.26	178.84	179.42
3/4	186.20	186.83	187.46	188.09	188.72	189.36	190.00	190.64	191.28	191.92	192.56	193.20	193.84	194.48	195.12	195.76
13-16	201.64	202.33	203.02	203.71	204.40	205.09	205.78	206.47	207.16	207.85	208.54	209.23	209.92	210.62	211.32	212.02
7/8	217.20	217.94	218.68	219.42	220.16	220.90	221.64	222.38	223.12	223.86	224.60	225.35	226.08	226.83	227.56	228.30
15-16	232.72	233.52	234.32	235.12	235.92	236.72	237.52	238.32	239.12	239.91	240.70	241.50	242.28	243.07	243.86	244.65
1	248.20	249.05	249.90	250.75	251.60	252.45	253.30	254.15	255.00	255.85	256.70	257.55	258.40	259.25	260.10	260.95
1 1-16	263.68	264.58	265.48	266.38	267.28	268.18	269.09	270.00	270.91	271.82	272.73	273.63	274.56	275.47	276.38	277.29
1 1/8	279.20	280.15	281.11	282.07	283.04	284.00	284.96	285.92	286.88	287.84	288.80	289.76	290.72	291.67	292.62	293.57
1 3-16	294.76	295.77	296.78	297.79	298.80	299.81	300.82	301.83	302.84	303.85	304.86	305.87	306.88	307.88	308.88	309.88
1 1/4	310.24	311.30	312.36	313.42	314.48	315.54	316.60	317.66	318.72	319.78	320.84	321.90	322.96	324.02	325.08	326.16
1 5-16	325.80	326.91	328.02	329.13	330.24	331.36	332.48	333.60	334.72	335.84	336.96	338.08	339.20	340.32	341.44	342.56
1 3/8	341.28	342.45	343.62	344.79	345.96	347.13	348.30	349.47	350.64	351.81	352.98	354.15	355.32	356.49	357.66	358.83
1 7-16	356.84	358.05	359.26	360.48	361.70	362.92	364.14	365.37	366.60	367.82	369.04	370.28	371.50	372.72	373.94	375.17
1 1/2	372.32	373.60	374.88	376.16	377.44	378.72	380.00	381.25	382.50	383.77	385.04	386.32	387.60	388.88	390.16	391.44

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	77 in. wide	77½ in. wide	78 in. wide	78¼ in. wide	78½ in. wide	78¾ in. wide	79 in. wide	79½ in. wide	79¾ in. wide	80 in. wide	80¼ in. wide	80½ in. wide	80¾ in. wide
3-16	49.04	49.21	49.72	49.89	50.06	50.23	50.40	50.52	50.72	50.88	51.04	51.36	51.52
¼	65.48	65.69	66.32	66.52	66.74	66.95	67.16	67.37	67.58	67.79	68.00	68.42	68.63
5-16	81.84	82.10	82.88	83.14	83.40	83.66	83.92	84.18	84.44	84.70	84.96	85.22	85.74
¾	98.24	98.55	99.48	99.80	100.12	100.44	100.76	101.07	101.38	101.69	102.00	102.64	102.96
7-16	114.60	114.96	116.04	116.41	116.78	117.15	117.52	117.89	118.26	118.63	119.00	119.37	120.11
½	130.92	131.34	132.18	132.60	133.44	133.86	134.28	134.70	135.13	135.56	136.00	136.42	137.26
9-16	147.28	147.76	148.24	148.72	149.20	149.68	150.16	150.64	151.12	151.61	152.10	152.59	154.54
5	163.60	164.13	165.19	165.72	166.78	167.31	167.84	168.38	168.92	169.46	170.00	170.53	171.59
11-16	180.00	180.58	181.16	181.74	182.32	182.91	183.50	184.09	184.68	185.25	185.82	186.39	188.70
¾	196.40	197.03	197.66	198.29	198.92	199.55	200.18	200.81	201.44	202.08	202.72	203.36	205.92
13-16	212.72	213.41	214.10	214.79	215.48	216.17	216.86	217.55	218.24	218.93	219.62	220.31	222.38
1	229.04	229.79	230.54	231.29	232.04	232.79	233.54	234.29	235.04	235.79	236.52	237.26	239.50
15-16	245.44	246.24	247.04	247.84	248.64	249.44	250.24	251.04	251.84	252.64	253.44	254.24	256.64
1	261.80	262.65	263.50	264.35	265.20	266.05	266.90	267.75	268.60	269.45	270.30	271.15	272.00
1 1-16	278.20	279.10	280.00	280.90	281.80	282.70	283.60	284.50	285.40	286.30	287.20	288.10	289.00
1 1-8	294.52	295.47	296.42	297.37	298.32	299.29	300.24	301.20	302.16	303.12	304.08	305.04	306.96
1 3-16	310.88	311.90	312.92	313.92	314.92	315.93	316.94	317.95	318.96	319.97	320.98	321.99	325.02
1 1-4	327.24	328.31	329.38	330.45	331.52	332.58	333.64	334.70	335.76	336.82	337.88	338.94	342.12
1 5-16	343.68	344.80	345.92	347.04	348.16	349.28	350.40	351.52	352.64	353.76	354.88	356.00	359.34
1 1-2	360.00	361.17	362.34	363.51	364.68	365.84	367.00	368.16	369.32	370.49	371.66	372.83	376.34
1 7-16	376.40	377.62	378.84	380.05	381.26	382.48	383.69	384.89	386.10	387.32	388.54	389.77	393.44
1 1-2	392.72	394.00	395.28	396.56	397.84	399.10	400.36	401.63	402.89	404.16	405.44	406.72	411.84

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	81		81½		81¾		82		82¼		82½		82¾		83		83¼		83½		83¾		84		84¼		84½		84¾				
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide			
3-16	51.68	51.84	52.00	52.16	52.32	52.48	52.64	52.80	52.96	53.12	53.28	53.44	53.60	53.76	53.92	54.08	54.24	54.40	54.56	54.72	54.88	55.04	55.20	55.36	55.52	55.68	55.84	56.00	56.16	56.32	56.48	56.64	
¼	68.84	69.05	69.26	69.47	69.68	69.89	70.10	70.31	70.52	70.73	70.94	71.15	71.36	71.58	71.80	72.02	72.23	72.44	72.65	72.86	73.07	73.28	73.49	73.70	73.91	74.12	74.33	74.54	74.75	74.96	75.17	75.38	
5-16	86.02	86.29	86.56	86.83	87.10	87.37	87.64	87.91	88.18	88.45	88.72	89.00	89.28	89.54	89.80	90.08	90.34	90.60	90.86	91.12	91.38	91.64	91.90	92.16	92.42	92.68	92.94	93.20	93.46	93.72	93.98	94.24	
¾	103.28	103.60	103.92	104.24	104.56	104.88	105.20	105.52	105.84	106.16	106.48	106.80	107.12	107.44	107.76	108.08	108.40	108.72	109.04	109.36	109.68	110.00	110.32	110.64	110.96	111.28	111.60	111.92	112.24	112.56	112.88	113.20	
7-16	120.48	120.86	121.24	121.62	122.00	122.37	122.74	123.11	123.48	123.85	124.22	124.59	124.96	125.33	125.70	126.07	126.44	126.81	127.18	127.55	127.92	128.29	128.66	129.03	129.40	129.77	130.14	130.51	130.88	131.25	131.62	131.99	132.36
½	137.68	138.10	138.52	138.94	139.36	139.78	140.20	140.62	141.04	141.46	141.88	142.30	142.72	143.14	143.56	143.98	144.40	144.82	145.24	145.66	146.08	146.50	146.92	147.34	147.76	148.18	148.60	149.02	149.44	149.86	150.28	150.70	151.12
9-16	155.04	155.52	156.00	156.46	156.92	157.38	157.84	158.30	158.76	159.23	159.70	160.17	160.64	161.12	161.60	162.08	162.56	163.04	163.52	164.00	164.48	164.96	165.44	165.92	166.40	166.88	167.36	167.84	168.32	168.80	169.28	169.76	170.24
5/8	172.12	172.65	173.18	173.71	174.24	174.78	175.32	175.86	176.40	176.94	177.48	178.02	178.56	179.09	179.62	180.15	180.68	181.21	181.74	182.27	182.80	183.33	183.86	184.39	184.92	185.45	185.98	186.51	187.04	187.57	188.10	188.63	189.16
11-16	189.28	189.87	190.46	191.06	191.66	192.24	192.82	193.41	194.00	194.58	195.16	195.74	196.32	196.91	197.50	198.09	198.67	199.25	199.83	200.41	201.00	201.58	202.16	202.74	203.32	203.90	204.48	205.06	205.64	206.22	206.80	207.38	207.96
¾	206.56	207.20	207.84	208.48	209.12	209.76	210.40	211.04	211.68	212.32	212.96	213.60	214.24	214.88	215.52	216.16	216.80	217.44	218.08	218.72	219.36	220.00	220.64	221.28	221.92	222.56	223.20	223.84	224.48	225.12	225.76	226.40	227.04
13-16	223.76	224.46	225.16	225.86	226.56	227.25	227.94	228.63	229.32	229.98	230.68	231.36	232.04	232.72	233.40	234.08	234.76	235.44	236.12	236.80	237.48	238.16	238.84	239.52	240.20	240.88	241.56	242.24	242.92	243.60	244.28	244.96	245.64
7/8	241.00	241.75	242.50	243.25	244.00	244.75	245.50	246.25	247.00	247.74	248.48	249.22	249.96	250.71	251.46	252.20	252.94	253.68	254.42	255.16	255.90	256.64	257.38	258.12	258.86	259.60	260.34	261.08	261.82	262.56	263.30	264.04	264.78
15-16	258.24	259.04	259.84	260.64	261.44	262.24	263.04	263.84	264.64	265.44	266.24	267.04	267.84	268.64	269.44	270.24	271.04	271.84	272.64	273.44	274.24	275.04	275.84	276.64	277.44	278.24	279.04	279.84	280.64	281.44	282.24	283.04	283.84
1	275.40	276.25	277.10	277.95	278.80	279.65	280.50	281.35	282.20	283.05	283.90	284.75	285.60	286.45	287.30	288.15	289.00	289.85	290.70	291.55	292.40	293.25	294.10	294.95	295.80	296.65	297.50	298.35	299.20	300.05	300.90	301.75	302.60
1 1-16	292.60	293.50	294.40	295.30	296.20	297.10	298.00	298.90	299.80	300.70	301.60	302.50	303.40	304.30	305.20	306.10	307.00	307.90	308.80	309.70	310.60	311.50	312.40	313.30	314.20	315.10	316.00	316.90	317.80	318.70	319.60	320.50	321.40
1 1/8	309.84	310.80	311.76	312.72	313.68	314.63	315.58	316.53	317.48	318.44	319.40	320.36	321.32	322.27	323.22	324.17	325.12	326.07	327.02	327.97	328.92	329.87	330.82	331.77	332.72	333.67	334.62	335.57	336.52	337.47	338.42	339.37	340.32
1 3-16	327.04	328.05	329.06	330.06	331.06	332.07	333.10	334.08	335.08	336.10	337.12	338.14	339.16	340.17	341.18	342.19	343.20	344.21	345.22	346.23	347.24	348.25	349.26	350.27	351.28	352.29	353.30	354.31	355.32	356.33	357.34	358.35	359.36
1 1/4	344.24	345.30	346.36	347.42	348.48	349.54	350.60	351.66	352.72	353.80	354.88	355.96	357.04	358.10	359.16	360.22	361.28	362.34	363.40	364.46	365.52	366.58	367.64	368.70	369.76	370.82	371.88	372.94	374.00	375.06	376.12	377.18	378.24
1 5-16	361.56	362.68	363.80	364.90	366.00	367.11	368.22	369.33	370.44	371.55	372.66	373.77	374.88	375.99	377.10	378.21	379.32	380.43	381.54	382.65	383.76	384.87	385.98	387.09	388.20	389.31	390.42	391.53	392.64	393.75	394.86	395.97	397.08
1 3/8	378.68	379.85	381.02	382.19	383.36	384.53	385.70	386.87	388.04	389.20	390.36	391.52	392.68	393.85	395.02	396.19	397.35	398.51	399.67	400.83	402.00	403.16	404.32	405.48	406.64	407.80	408.96	410.12	411.28	412.44	413.60	414.76	415.92
1 7-16	395.88	397.10	398.32	399.53	400.74	401.96	403.18	404.40	405.62	406.86	408.10	409.34	410.58	411.81	413.04	414.27	415.50	416.73	417.96	419.19	420.42	421.65	422.88	424.11	425.34	426.57	427.80	429.03	430.26	431.49	432.72	433.95	435.18
1 1/2	413.12	414.40	415.68	416.96	418.24	419.51	420.78	422.05	423.32	424.59	425.86	427.13	428.40	429.68	430.96	432.24	433.52	434.80	436.08	437.36	438.64	439.92	441.20	442.48	443.76	445.04	446.32	447.60	448.88	450.16	451.44	452.72	454.00

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	85	85 1/4	85 1/2	85 3/4	86	86 1/4	86 1/2	86 3/4	87	87 1/4	87 1/2	87 3/4	88	88 1/4	88 1/2	88 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	54.24	54.40	54.56	54.72	54.88	55.04	55.20	55.36	55.52	55.68	55.84	56.00	56.16	56.31	56.46	56.61
1/4	72.24	72.46	72.68	72.90	73.12	73.32	73.52	73.72	73.92	74.13	74.34	74.55	74.76	74.98	75.20	75.42
5-16	90.35	90.60	90.85	91.11	91.36	91.62	91.88	92.14	92.40	92.66	92.92	93.18	93.44	93.71	93.98	94.25
3/8	108.40	108.72	109.04	109.36	109.68	110.00	110.32	110.64	110.96	111.28	111.60	111.92	112.24	112.56	112.88	113.20
7-16	126.44	126.81	127.18	127.55	127.92	128.29	128.66	129.03	129.40	129.77	130.14	130.51	130.88	131.26	131.64	132.02
1/2	144.52	144.95	145.38	145.81	146.24	146.66	147.08	147.50	147.92	148.34	148.76	149.18	149.60	150.03	150.46	150.89
9-16	162.56	163.04	163.52	164.00	164.48	164.94	165.40	165.86	166.32	166.78	167.24	167.71	168.18	168.66	169.14	169.62
5/8	180.68	181.21	181.74	182.27	182.80	183.33	183.86	184.39	184.92	185.45	185.98	186.51	187.04	187.57	188.10	188.63
11-16	198.68	199.27	199.86	200.44	201.04	201.61	202.18	202.75	203.32	203.89	204.46	205.04	205.62	206.21	206.80	207.40
3/4	216.80	217.44	218.08	218.72	219.36	219.99	220.62	221.25	221.88	222.51	223.14	223.77	224.40	225.03	225.66	226.29
13-16	234.76	235.45	236.14	236.83	237.52	238.22	238.92	239.62	240.32	241.02	241.72	242.42	243.12	243.82	244.52	245.22
7/8	252.94	253.68	254.42	255.17	255.88	256.61	257.34	258.08	258.82	259.56	260.30	261.04	261.78	262.52	263.26	264.01
15-16	271.04	271.84	272.64	273.44	274.22	275.01	275.80	276.59	277.38	278.17	278.96	279.75	280.54	281.33	282.12	282.92
1	289.00	289.85	290.70	291.55	292.40	293.26	294.10	294.95	295.80	296.65	297.50	298.35	299.20	300.05	300.90	301.75
1 1-16	307.00	307.91	308.82	309.71	310.65	311.55	312.46	313.37	314.28	315.12	316.10	317.01	317.92	318.82	319.72	320.62
1 1/8	325.12	326.08	327.04	328.00	328.96	329.92	330.88	331.84	332.80	333.76	334.72	335.68	336.64	337.60	338.56	339.52
1 3-16	343.20	344.20	345.20	346.20	347.20	348.21	349.22	350.23	351.24	352.26	353.28	354.30	355.32	356.33	357.34	358.35
1 1/4	361.28	362.34	363.40	364.46	365.52	366.58	367.64	368.70	369.76	370.84	371.92	373.00	374.08	375.14	376.20	377.26
1 5-16	379.32	380.43	381.54	382.65	383.76	384.87	385.98	387.09	388.20	389.31	390.42	391.53	392.64	393.76	394.88	396.00
1 3/8	397.36	398.52	399.68	400.84	402.00	403.17	404.34	405.51	406.68	407.85	409.02	410.19	411.36	412.53	413.70	414.87
1 7-16	415.50	416.71	417.92	419.14	420.34	421.55	422.76	423.98	425.20	426.42	427.64	428.86	430.08	431.31	432.54	433.77
1 1/2	433.52	434.80	436.08	437.36	438.64	439.91	441.18	442.45	443.72	444.99	446.26	447.53	448.80	450.07	451.34	452.61

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	89 in. wide	89¼ in. wide	89½ in. wide	89¾ in. wide	90 in. wide	90¼ in. wide	90½ in. wide	90¾ in. wide	91 in. wide	91¼ in. wide	91½ in. wide	91¾ in. wide	92 in. wide	92¼ in. wide	92½ in. wide	92¾ in. wide
3-16	56.76	56.91	57.06	57.21	57.36	57.51	57.66	57.81	57.96	58.12	58.28	58.49	58.58	58.74	58.90	59.07
¼	75.64	75.86	76.08	76.30	76.52	76.73	76.94	77.15	77.36	77.57	77.78	78.00	78.22	78.44	78.66	78.88
5-16	94.52	94.79	95.06	95.33	95.60	95.87	96.14	96.42	96.70	96.97	97.24	97.50	97.76	98.03	98.30	98.57
¾	113.52	113.84	114.16	114.48	114.80	115.13	115.46	115.79	116.12	116.44	116.76	117.09	117.42	117.73	118.04	118.36
7-16	132.40	132.78	133.16	133.54	133.92	134.30	134.68	135.06	135.44	135.82	136.20	136.57	136.94	137.32	137.70	138.08
½	151.32	151.75	152.18	152.61	153.04	153.46	153.88	154.30	154.72	155.14	155.56	155.98	156.40	156.82	157.24	157.66
9-16	170.10	170.59	171.08	171.57	172.06	172.55	173.04	173.53	174.01	174.51	175.00	175.50	176.00	176.48	176.96	177.44
¾	189.16	189.69	190.22	190.75	191.28	191.81	192.34	192.87	193.40	193.93	194.46	194.99	195.52	196.05	196.58	197.11
11-16	208.00	208.60	209.20	209.79	210.38	210.97	211.56	212.15	212.74	213.33	213.91	214.49	215.06	215.64	216.22	216.81
¾	226.92	227.55	228.18	228.82	229.46	230.10	230.74	231.38	232.02	232.66	233.31	233.96	234.61	235.26	235.90	236.55
13-16	245.92	246.61	247.30	247.98	248.66	249.35	250.04	250.73	251.42	252.10	252.78	253.45	254.12	254.81	255.50	256.19
¾	264.76	265.51	266.26	267.01	267.76	268.50	269.24	270.00	270.72	271.46	272.21	272.96	273.72	274.46	275.20	275.94
15-16	283.72	284.51	285.30	286.09	286.88	287.68	288.48	289.28	290.08	290.88	291.68	292.48	293.28	294.08	294.88	295.68
1	302.60	303.45	304.30	305.15	306.00	306.85	307.70	308.55	309.40	310.25	311.10	311.95	312.80	313.65	314.50	315.35
1 1-16	321.52	322.42	323.32	324.22	325.12	326.02	326.92	327.82	328.72	329.62	330.52	331.42	332.32	333.23	334.14	335.05
1 ½	340.48	341.44	342.40	343.36	344.32	345.27	346.22	347.18	348.12	349.08	350.04	351.01	351.97	352.93	353.88	354.84
1 3-16	359.36	360.36	361.36	362.36	363.36	364.38	365.40	366.42	367.44	368.46	369.48	370.50	371.52	372.53	373.54	374.55
1 ¼	378.32	379.38	380.44	381.50	382.56	383.62	384.68	385.74	386.80	387.86	388.92	389.98	391.04	392.10	393.16	394.22
1 5-16	397.12	398.24	399.36	400.48	401.60	402.72	403.84	404.96	406.08	407.20	408.32	409.44	410.56	411.68	412.80	413.92
1 ¾	416.04	417.21	418.38	419.54	420.72	421.89	423.06	424.23	425.40	426.57	427.74	428.91	430.08	431.25	432.42	433.59
1 7-16	435.00	436.23	437.46	438.69	439.92	441.14	442.36	443.58	444.80	446.02	447.24	448.46	449.68	450.90	452.12	453.34
1 ½	453.88	455.15	456.42	457.69	458.96	460.24	461.52	462.80	464.08	465.36	466.64	467.92	469.20	470.48	471.76	473.04

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	93	93 1/4	93 1/2	93 3/4	94	94 1/4	94 1/2	94 3/4	95	95 1/4	95 1/2	95 3/4	96	96 1/4	96 1/2	96 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	59.24	59.41	59.58	59.75	59.92	60.09	60.26	60.43	60.60	60.77	60.94	61.11	61.28	61.44	61.60	61.76
1/4	79.10	79.32	79.54	79.76	79.98	80.19	80.40	80.60	80.80	81.00	81.20	81.41	81.60	81.82	82.04	82.26
5-16	98.84	99.11	99.38	99.65	99.92	100.19	100.46	100.73	101.00	101.27	101.54	101.81	102.08	102.34	102.60	102.86
3/8	118.68	118.99	119.30	119.61	119.92	120.23	120.54	120.85	121.16	121.47	121.78	122.10	122.40	122.72	123.04	123.36
7-16	138.46	138.82	139.18	139.55	139.92	140.29	140.66	141.03	141.40	141.77	142.14	142.51	142.88	143.25	143.62	143.99
1/2	158.08	158.50	158.92	159.34	159.76	160.19	160.62	161.05	161.48	161.91	162.34	162.76	163.20	163.62	164.04	164.46
9-16	177.92	178.40	178.88	179.36	179.84	180.32	180.80	181.28	181.76	182.24	182.72	183.20	183.68	184.15	184.62	185.09
5/8	197.64	198.17	198.70	199.23	199.76	200.29	200.82	201.35	201.88	202.41	202.94	203.47	204.00	204.53	205.06	205.59
11-16	217.40	217.99	218.58	219.17	219.76	220.35	220.94	221.53	222.12	222.71	223.30	223.89	224.48	225.06	225.64	226.22
3/4	237.20	237.84	238.48	239.12	239.76	240.39	241.02	241.65	242.28	242.91	243.54	244.18	244.80	245.45	246.10	246.75
13-16	256.88	257.57	258.26	258.95	259.64	260.33	261.02	261.71	262.40	263.09	263.78	264.47	265.16	265.85	266.54	267.23
7/8	276.68	277.42	278.16	278.90	279.64	280.38	281.12	281.86	282.60	283.35	284.10	284.85	285.60	286.34	287.08	287.82
15-16	296.48	297.28	298.08	298.88	299.68	300.48	301.26	302.05	302.84	303.63	304.42	305.22	306.00	306.80	307.60	308.40
1	316.20	317.05	317.90	318.75	319.60	320.45	321.30	322.15	323.00	323.85	324.70	325.55	326.40	327.25	328.10	328.95
1 1-16	335.96	336.85	337.78	338.69	339.60	340.50	341.40	342.30	343.20	344.10	345.00	345.90	346.80	347.70	348.60	349.50
1 1/8	355.80	356.74	357.68	358.62	359.56	360.52	361.48	362.44	363.40	364.35	365.30	366.25	367.20	368.16	369.12	370.08
1 3-16	375.56	376.57	377.58	378.59	379.60	380.61	381.62	382.63	383.64	384.65	385.66	386.67	387.68	388.68	389.68	390.68
1 1/4	395.28	396.34	397.40	398.46	399.52	400.58	401.64	402.70	403.76	404.82	405.88	406.94	408.00	409.06	410.12	411.18
1 5-16	415.04	416.16	417.28	418.40	419.52	420.64	421.76	422.88	424.00	425.12	426.24	427.36	428.48	429.59	430.70	431.81
1 3/8	434.76	435.93	437.10	438.27	439.44	440.61	441.78	443.05	444.12	445.39	446.46	447.63	448.80	449.97	451.14	452.31
1 7-16	454.56	455.78	457.00	458.22	459.44	460.66	461.88	463.10	464.32	465.54	466.76	467.98	469.20	470.42	471.64	472.86
1 1/2	474.32	475.60	476.88	478.16	479.44	480.72	482.00	483.28	484.56	485.83	487.10	488.38	489.60	490.88	492.16	493.44

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	97 in. wide	97 1/4 in. wide	97 1/2 in. wide	97 3/4 in. wide	98 in. wide	98 1/4 in. wide	98 1/2 in. wide	98 3/4 in. wide	99 in. wide	99 1/4 in. wide	99 1/2 in. wide	99 3/4 in. wide	100 in. wide	100 1/4 in. wide	100 1/2 in. wide	100 3/4 in. wide
3-16	61.92	62.08	62.24	62.40	62.56	62.72	62.88	63.04	63.20	63.36	63.52	63.68	63.84	63.99	64.14	64.30
1/4	82.48	82.70	82.92	83.14	83.36	83.57	83.78	83.99	84.20	84.41	84.62	84.83	85.04	85.25	85.46	85.67
5-16	103.12	103.37	103.62	103.87	104.12	104.38	104.64	104.90	105.16	105.43	105.70	105.97	106.24	106.51	106.78	107.05
3/8	123.68	124.00	124.32	124.64	124.96	125.28	125.60	125.92	126.24	126.56	126.88	127.20	127.52	127.84	128.16	128.48
7-16	144.36	144.73	145.10	145.47	145.84	146.21	146.58	146.95	147.32	147.69	148.06	148.43	148.80	149.17	149.54	149.91
1/2	164.88	165.30	165.72	166.14	166.56	166.99	167.42	167.85	168.28	168.71	169.14	169.57	170.00	170.42	170.84	171.26
9-16	185.56	186.03	186.50	186.97	187.44	187.91	188.38	188.85	189.32	189.79	190.26	190.73	191.21	191.69	192.17	192.66
5/8	206.12	206.65	207.18	207.71	208.24	208.77	209.30	209.83	210.36	210.89	211.42	211.95	212.48	213.01	213.54	214.07
11-16	226.80	227.38	227.96	228.54	229.12	229.70	230.28	230.86	231.44	232.02	232.60	233.18	233.76	234.34	234.92	235.50
3/4	247.40	248.05	248.70	249.35	250.00	250.64	251.27	251.90	252.53	253.16	253.79	254.42	255.05	255.68	256.32	256.96
13-16	267.92	268.60	269.28	269.96	270.65	271.34	272.04	272.74	273.44	274.14	274.84	275.54	276.24	276.93	277.62	278.31
7/8	288.56	289.30	290.04	290.78	291.52	292.27	293.02	293.77	294.52	295.27	296.02	296.77	297.52	298.26	299.00	299.74
15-16	309.20	310.00	310.80	311.60	312.40	313.19	313.98	314.77	315.56	316.35	317.14	317.93	318.72	319.51	320.32	321.12
1	329.80	330.65	331.50	332.35	333.20	334.05	334.90	335.75	336.60	337.45	338.30	339.15	340.00	340.85	341.70	342.55
1 1-16	350.40	351.30	352.20	353.10	354.00	354.91	355.82	356.73	357.64	358.55	359.46	360.37	361.28	362.18	363.08	363.98
1 1/8	371.04	372.00	372.96	373.92	374.88	375.84	376.80	377.76	378.72	379.68	380.64	381.60	382.56	383.51	384.46	385.41
1 3-16	391.68	392.68	393.68	394.68	395.68	396.68	397.68	398.68	399.68	400.68	401.68	402.68	403.68	404.69	405.70	406.72
1 1/4	412.24	413.30	414.36	415.42	416.48	417.54	418.60	419.66	420.72	421.78	422.84	423.90	424.96	426.03	427.10	428.17
1 5-16	432.92	434.03	435.14	436.25	437.36	438.47	439.58	440.69	441.80	442.90	444.01	445.12	446.24	447.36	448.48	449.59
1 3/8	453.48	454.65	455.82	456.99	458.16	459.33	460.50	461.67	462.84	464.01	465.18	466.35	467.51	468.68	469.83	471.00
1 7-16	474.08	475.30	476.52	477.74	478.96	480.19	481.42	482.65	483.88	485.11	486.34	487.57	488.80	490.02	491.24	492.46
1 1/2	494.72	496.00	497.28	498.56	499.84	501.11	502.38	503.64	504.92	506.19	507.46	508.73	510.00	511.27	512.54	513.82

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	101	101 1/4	101 1/2	101 3/4	102	102 1/4	102 1/2	102 3/4	103	103 1/4	103 1/2	103 3/4	104	104 1/4	104 1/2	104 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	64.45	64.60	64.75	64.90	65.05	65.20	65.36	65.52	65.68	65.83	65.97	66.12	66.25	66.39	66.54	66.69
1/4	85.88	86.09	86.30	86.51	86.72	86.94	87.16	87.38	87.60	87.82	88.04	88.26	88.48	88.69	88.90	89.11
5-16	107.32	107.59	107.86	108.13	108.40	108.66	108.92	109.18	109.44	109.70	109.96	110.22	110.48	110.74	111.02	111.28
3/8	128.80	129.12	129.44	129.76	130.08	130.40	130.72	131.04	131.36	131.68	132.00	132.32	132.64	132.96	133.28	133.60
7-16	150.28	150.65	151.02	151.39	151.76	152.13	152.50	152.87	153.24	153.61	153.98	154.36	154.74	155.12	155.50	155.87
1/2	171.68	172.10	172.52	172.94	173.36	173.79	174.22	174.65	175.08	175.51	175.94	176.37	176.80	177.23	177.66	178.09
9-16	193.15	193.63	194.12	194.62	195.12	195.61	196.10	196.59	197.07	197.54	198.00	198.46	198.92	199.39	199.86	200.33
5/8	214.60	215.13	215.66	216.19	216.72	217.25	217.78	218.31	218.84	219.37	219.90	220.43	220.96	221.50	222.04	222.58
11-16	236.08	236.66	237.24	237.82	238.40	238.98	239.56	240.14	240.72	241.32	241.92	242.52	243.12	243.70	244.28	244.86
3/4	257.60	258.24	258.88	259.52	260.16	260.80	261.44	262.08	262.72	263.36	264.00	264.64	265.28	265.92	266.56	267.20
13-16	279.00	279.69	280.38	281.07	281.76	282.46	283.16	283.86	284.56	285.24	285.92	286.60	287.28	287.97	288.66	289.35
7/8	300.48	301.23	301.98	302.73	303.48	304.23	304.98	305.73	306.48	307.22	307.96	308.71	309.44	310.18	310.92	311.66
15-16	321.92	322.72	323.52	324.32	325.12	325.92	326.72	327.52	328.32	329.12	329.92	330.72	331.52	332.32	333.12	333.92
1	343.40	344.25	345.10	345.95	346.80	347.65	348.50	349.35	350.20	351.05	351.90	352.75	353.60	354.45	355.30	356.15
1 1-16	364.88	365.78	366.68	367.58	368.48	369.38	370.28	371.18	372.08	372.98	373.88	374.78	375.68	376.59	377.50	378.41
1 1/8	386.36	387.31	388.26	389.21	390.16	391.11	392.06	393.01	393.96	394.91	395.86	396.81	397.76	398.71	399.66	400.61
1 3-16	407.74	408.76	409.78	410.80	411.82	412.84	413.86	414.88	415.90	416.88	417.86	418.85	419.84	420.86	421.88	422.90
1 1/4	429.24	430.31	431.38	432.45	433.52	434.59	435.66	436.73	437.80	438.85	439.90	440.95	442.00	443.07	444.14	445.21
1 5-16	450.72	451.84	452.96	454.08	455.20	456.31	457.42	458.53	459.65	460.77	461.90	462.03	464.16	465.28	466.40	467.52
1 3/8	472.16	473.33	474.50	475.66	476.82	477.99	479.16	480.32	481.48	482.65	483.82	484.99	486.16	487.33	488.50	489.67
1 7-16	493.68	495.90	496.12	497.34	498.56	499.78	501.00	502.22	503.44	504.66	505.88	507.10	508.32	509.54	510.76	511.98
1 1/2	515.08	516.35	517.62	518.91	520.20	521.48	522.76	523.04	525.32	526.59	527.86	529.13	530.40	531.68	532.96	534.24

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	105	105½	105¾	106	106¼	106½	106¾	107	107¼	107½	107¾	108	108¼	108½	108¾	
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	
3-16	66.85	67.01	67.17	67.34	67.51	67.68	67.84	68.00	68.16	68.32	68.48	68.64	68.80	68.96	69.12	69.28
¼	89.32	89.53	89.74	89.95	90.16	90.37	90.58	90.79	91.00	91.21	91.42	91.63	91.84	92.05	92.26	92.47
5-16	111.56	111.83	112.10	112.37	112.64	112.90	113.16	113.42	113.68	113.94	114.20	114.46	114.72	115.00	115.26	115.53
¾	133.92	134.24	134.56	134.88	135.20	135.52	135.84	136.16	136.48	136.80	137.12	137.44	137.76	138.07	138.38	138.70
7-16	156.24	156.62	157.00	157.38	157.76	158.13	158.48	158.84	159.20	159.57	159.94	160.31	160.68	161.05	161.42	161.79
½	178.52	178.95	179.38	179.81	180.24	180.67	181.10	181.53	181.96	182.39	182.82	183.25	183.68	184.10	184.52	184.94
9-16	200.80	201.28	201.76	202.24	202.72	203.20	203.68	204.16	204.64	205.12	205.60	206.08	206.56	207.04	207.52	208.00
5/8	223.12	223.65	224.18	224.71	225.24	225.77	226.30	226.83	227.36	227.89	228.42	228.95	229.48	230.01	230.54	231.07
11-16	245.44	246.02	246.60	247.18	247.76	248.34	248.92	249.50	250.08	250.66	251.24	251.82	252.40	253.02	253.60	254.18
¾	267.84	268.48	269.12	269.76	270.40	271.04	271.68	272.32	272.96	273.60	274.24	274.88	275.52	276.16	276.80	277.44
13-16	290.04	290.73	291.42	292.11	292.80	293.49	294.18	294.87	295.56	296.25	296.94	297.63	298.32	299.01	299.70	300.39
5/8	312.40	313.15	313.90	314.65	315.40	316.14	316.88	317.62	318.36	319.10	319.84	320.58	321.32	322.07	322.82	323.57
15-16	334.72	335.52	336.32	337.12	337.92	338.72	339.52	340.32	341.12	341.92	342.72	343.51	344.30	345.10	345.90	346.69
1	357.00	357.85	358.70	359.55	360.40	361.25	362.10	362.95	363.80	364.65	365.50	366.35	367.20	368.05	368.90	369.75
1 1-16	379.32	380.23	381.14	382.05	382.96	383.86	384.76	385.66	386.56	387.46	388.36	389.26	390.16	391.06	391.96	392.86
1 1/8	401.56	402.51	403.46	404.41	405.36	406.32	407.28	408.24	409.20	410.16	411.12	412.08	413.04	414.00	414.96	415.92
1 3-16	423.92	424.94	425.96	426.98	428.00	429.01	430.02	431.03	432.04	433.04	434.04	435.04	436.04	437.05	438.06	439.07
1 1/4	446.28	447.35	448.42	449.49	450.56	451.62	452.68	453.74	454.80	455.86	456.92	457.98	459.04	460.10	461.16	462.22
1 5-16	468.64	469.76	470.88	472.00	473.12	474.23	475.34	476.45	477.56	478.67	479.78	480.89	482.00	483.11	484.22	485.33
1 3/8	490.84	492.01	493.18	494.35	495.52	496.69	497.86	499.03	500.20	501.37	502.54	503.71	504.88	506.05	507.22	508.39
1 7-16	513.20	514.42	515.64	516.86	518.08	519.30	520.52	521.74	522.96	524.18	525.40	526.62	527.84	529.06	530.28	531.50
1 1/2	535.52	536.80	538.08	539.36	540.64	541.92	543.20	544.48	545.76	547.04	548.32	549.60	550.88	552.14	553.42	554.69

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	109 in. wide	109¼ in. wide	109½ in. wide	109¾ in. wide	110 in. wide	110¼ in. wide	110½ in. wide	110¾ in. wide	111 in. wide	111¼ in. wide	111½ in. wide	111¾ in. wide	112 in. wide	112¼ in. wide	112½ in. wide	112¾ in. wide
3-16	69.44	69.60	69.76	69.92	70.08	70.24	70.40	.7056	70.72	70.88	71.04	71.20	71.36	71.52	71.68	71.84
¼	92.68	92.89	93.10	93.31	93.52	93.73	93.94	94.15	94.36	94.57	94.78	94.99	95.20	95.41	95.62	95.83
5-16	115.80	116.07	116.34	116.61	116.88	117.15	117.42	117.69	117.96	118.22	118.48	118.75	119.02	119.29	119.56	119.82
¾	139.02	139.34	139.66	139.98	140.30	140.62	140.94	141.26	141.58	141.91	142.24	142.56	142.88	143.20	143.52	143.84
7-16	162.16	162.53	162.90	163.27	163.64	164.01	164.38	164.75	165.12	165.49	165.86	166.23	166.60	166.97	167.34	167.71
¾	185.36	185.78	186.20	186.62	187.04	187.46	187.88	188.30	188.72	189.14	189.56	189.98	190.40	190.82	191.24	191.66
9-16	208.48	208.96	209.44	209.92	210.40	210.88	211.36	211.84	212.32	212.80	213.28	213.76	214.24	214.72	215.20	215.68
5	231.60	232.13	232.66	233.19	233.72	234.25	234.78	235.31	235.84	236.37	236.90	237.43	237.96	238.49	239.02	239.55
11-16	254.76	255.34	255.94	256.53	257.12	257.70	258.28	258.86	259.44	260.02	260.60	261.18	261.76	262.34	262.92	263.50
¾	278.08	278.71	279.34	279.97	280.60	281.24	281.88	282.52	283.16	283.80	284.44	285.07	285.70	286.33	286.96	287.60
13-16	301.08	301.77	302.46	303.15	303.84	304.53	305.22	305.91	306.60	307.29	307.98	308.67	309.36	310.05	310.74	311.43
7	324.32	325.05	325.78	326.52	327.26	327.99	328.72	329.44	330.20	330.95	331.70	332.45	333.20	333.95	334.70	335.45
15-16	347.48	348.27	349.06	349.85	350.64	351.44	352.24	353.04	353.84	354.64	355.44	356.24	357.04	357.84	358.64	359.44
1	370.60	371.45	372.30	373.15	374.00	374.85	375.70	376.55	377.40	378.25	379.10	379.95	380.80	381.65	382.50	383.35
1 1-16	393.76	394.66	395.56	396.46	397.36	398.26	399.16	400.06	400.96	401.86	402.76	403.66	404.56	405.46	406.36	407.26
1 ½	416.88	417.84	418.80	419.76	420.72	421.68	422.64	423.60	424.56	425.52	426.48	427.44	428.40	429.36	430.32	431.28
1 3-16	440.08	441.09	442.10	443.11	444.12	445.13	446.14	447.15	448.16	449.17	450.18	451.19	452.20	453.21	454.22	455.23
1 ¼	463.28	464.34	465.40	466.46	467.52	468.58	469.64	470.70	471.76	472.82	473.88	474.94	476.00	477.06	478.12	479.18
1 5-16	486.44	487.55	488.66	489.77	490.88	491.99	493.10	494.21	495.32	496.43	497.54	498.65	499.76	500.89	502.00	503.12
1 ¾	509.56	510.73	511.90	513.07	514.24	515.41	516.58	517.75	518.92	520.09	521.26	522.43	523.60	524.77	525.94	527.11
1 7-16	532.72	533.94	535.16	536.38	537.60	538.82	540.04	541.26	542.48	543.70	544.92	546.14	547.36	548.57	549.82	551.05
1 ½	555.96	557.23	558.50	559.77	561.04	562.31	563.58	564.85	566.12	567.49	568.86	569.93	571.20	572.48	573.76	575.04

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches.	113	113 1/4	113 1/2	113 3/4	114	114 1/4	114 1/2	114 3/4	115	115 1/4	115 1/2	115 3/4	116	116 1/4	116 1/2	116 3/4	116 1/2	116 3/4
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide
3-16	72.00	72.16	72.32	72.48	72.64	72.80	72.96	73.12	73.28	73.44	73.60	73.76	73.95	74.11	74.27	74.43		
1/4	96.04	96.25	96.46	96.67	96.88	97.09	97.30	97.51	97.72	97.93	98.14	98.35	98.60	98.81	99.03	99.24		
5-16	120.08	120.34	120.60	120.86	121.12	121.38	121.64	121.90	122.16	122.42	122.68	122.94	123.25	123.52	123.78	124.05		
3/8	144.16	144.48	144.80	145.12	145.44	145.76	146.08	146.40	146.72	147.04	147.36	147.68	147.90	148.22	148.54	148.86		
7-16	168.08	168.46	168.84	169.22	169.60	169.97	170.34	170.71	171.08	171.45	171.82	172.19	172.55	172.92	173.29	173.67		
1/2	192.08	192.50	192.92	193.34	193.76	194.18	194.60	195.02	195.44	195.86	196.28	196.70	197.20	197.63	198.05	198.48		
9-16	216.16	216.64	217.12	217.60	218.08	218.56	219.04	219.52	220.00	220.48	220.96	221.44	221.85	222.33	222.81	223.28		
5/8	240.08	240.60	241.12	241.64	242.16	242.68	243.22	243.75	244.28	244.81	245.34	245.87	246.50	247.03	247.56	248.09		
11-16	264.08	264.66	265.24	265.82	266.40	266.98	267.56	268.14	268.72	269.31	269.90	270.48	271.15	271.73	272.32	272.90		
3/4	288.24	288.88	289.52	290.16	290.80	291.43	292.06	292.69	293.32	293.96	294.60	295.24	295.80	296.44	297.08	297.71		
13-16	312.12	312.81	313.50	314.19	314.88	315.57	316.26	316.95	317.64	318.33	319.02	319.71	320.45	321.14	321.83	322.52		
7/8	336.20	336.95	337.70	338.45	339.20	339.95	340.70	341.45	342.20	342.95	343.68	344.44	345.10	345.84	346.59	347.33		
15-16	360.24	361.04	361.84	362.64	363.44	364.23	365.02	365.81	366.60	367.39	368.18	368.99	369.75	370.55	371.34	372.14		
1	384.20	385.05	385.90	386.75	387.60	388.45	389.30	390.15	391.00	391.85	392.70	393.55	394.40	395.25	396.10	396.95		
1 1-16	408.16	409.06	409.96	410.86	411.76	412.66	413.56	414.46	415.36	416.27	417.18	418.08	419.05	419.96	420.86	421.76		
1 1/8	432.24	433.20	434.16	435.12	436.08	437.04	437.98	438.93	439.88	440.83	441.78	442.73	443.70	444.66	445.61	446.57		
1 3-16	456.24	457.25	458.26	459.27	460.28	461.30	462.32	463.32	464.32	465.33	466.34	467.35	468.35	469.36	470.37	471.38		
1 1/4	480.24	481.30	482.36	483.42	484.48	485.54	486.60	487.66	488.72	489.78	490.84	491.90	493.00	494.06	495.13	496.19		
1 5-16	504.24	505.36	506.48	507.60	508.72	509.83	510.94	512.05	513.16	514.27	515.38	516.49	517.65	518.77	519.88	521.00		
1 3/8	528.28	529.45	530.62	531.79	532.96	534.12	535.30	536.47	537.64	538.81	539.98	541.15	542.30	543.47	544.64	545.81		
1 7-16	552.28	553.51	554.74	555.97	557.20	558.43	559.66	560.89	562.12	563.35	564.58	565.80	566.95	568.17	569.39	570.62		
1 1/2	576.32	577.60	578.88	580.16	581.44	582.72	584.00	585.28	586.56	587.84	589.12	590.40	591.60	592.88	594.15	595.43		

THE PHOENIX IRON COMPANY

WEIGHTS OF STEEL PLATES PER LIN. FT.

Continued

Thick- ness in inches	117	117½	117¾	118	118¼	118½	118¾	119	119¼	119½	119¾	120	120¼	120½	120¾	
	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	in. wide	
3-16	74.59	74.75	74.91	75.07	75.23	75.39	75.55	75.71	75.87	76.02	76.18	76.34	76.50	76.66	76.82	76.98
¼	99.45	99.66	99.88	100.09	100.30	100.51	100.73	100.94	101.15	101.36	101.58	101.79	102.00	102.21	102.43	102.64
5-16	124.31	124.58	124.84	125.11	125.38	125.64	125.91	126.17	126.44	126.70	126.97	127.23	127.50	127.77	128.03	128.30
¾	149.18	149.49	149.81	150.13	150.45	150.77	151.09	151.41	151.73	152.04	152.36	152.68	153.00	153.32	153.64	153.96
7-16	174.04	174.41	174.78	175.15	175.53	175.90	176.27	176.64	177.01	177.38	177.76	178.13	178.50	178.87	179.24	179.62
¾	198.90	199.33	199.75	200.18	200.60	201.03	201.45	201.88	202.30	202.73	203.15	203.58	204.00	204.43	204.85	205.28
9-16	223.76	224.24	224.72	225.20	225.68	226.15	226.63	227.11	227.59	228.07	228.54	229.02	229.50	229.98	230.46	230.93
¾	248.63	249.16	249.69	250.22	250.75	251.28	251.81	252.34	252.88	253.41	253.94	254.47	255.00	255.53	256.06	256.59
11-16	273.49	274.07	274.66	275.24	275.83	276.41	276.99	277.58	278.16	278.75	279.33	279.92	280.50	281.08	281.67	282.25
¾	298.35	298.99	299.63	300.26	300.90	301.54	302.18	302.81	303.45	304.09	304.73	305.36	306.00	306.64	307.28	307.91
13-16	323.21	323.90	324.59	325.28	325.98	326.67	327.36	328.05	328.74	329.43	330.12	330.81	331.50	332.19	332.88	333.57
¾	348.08	348.82	349.56	350.31	351.05	351.79	352.54	353.28	354.03	354.77	355.51	356.26	357.00	357.74	358.49	359.23
15-16	372.94	373.73	374.53	375.33	376.13	376.92	377.72	378.52	379.31	380.11	380.91	381.70	382.50	383.30	384.09	384.89
1	397.80	398.65	399.50	400.35	401.20	402.05	402.90	403.75	404.60	405.45	406.30	407.15	408.00	408.85	409.70	410.55
1 1-16	422.66	423.57	424.47	425.37	426.28	427.18	428.09	428.98	429.89	430.79	431.70	432.59	433.50	434.41	435.31	436.21
1 ¼	447.53	448.48	449.44	450.39	451.35	452.31	453.26	454.22	455.18	456.13	457.09	458.04	459.00	459.96	460.91	461.87
1 3-16	472.39	473.40	474.41	475.41	476.43	477.44	478.45	479.45	480.46	481.47	482.49	483.49	484.50	485.51	486.52	487.53
1 ½	497.25	498.31	499.38	500.44	501.50	502.56	503.63	504.69	505.75	506.81	507.88	508.94	510.00	511.06	512.13	513.19
1 5-16	522.11	523.23	524.34	525.46	526.58	527.69	528.81	529.92	531.04	532.15	533.27	534.38	535.50	536.62	537.73	538.85
1 ¾	546.98	548.14	549.31	550.49	551.65	552.82	553.99	555.16	556.33	557.49	558.66	559.83	561.00	562.17	563.34	564.51
1 7-16	571.84	573.06	574.28	575.50	576.73	577.95	579.17	580.39	581.61	582.83	584.05	585.28	586.50	587.72	588.94	590.17
1 ¾	596.70	597.98	599.25	600.53	601.80	603.08	604.35	605.63	606.90	608.18	609.45	610.73	612.00	613.28	614.55	615.83

THE PHOENIX IRON COMPANY

WEIGHTS OF IRON PILES FOR 1877

NO.	DESCRIPTION	WEIGHT	NO.	DESCRIPTION	WEIGHT
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THE PHOENIX IRON COMPANY

THE PHOENIX IRON COMPANY

THE PHOENIX IRON COMPANY

THE PHOENIX IRON COMPANY

EDWARD STERN & CO., INC
PHILADELPHIA

