INDEX

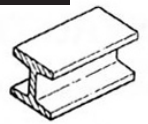
THIS BOOK SUGGESTS MATERIALS AND SERVICES THAT CAN BE FURNISHED. INFORMATION REGARDING PRICES WILL BE FURNISHED UPON REQUEST

INDEX (continued)

ASTM SPEC A-36

ASTM	Minimum Yield Strength, PSI	Tensil Strength, PSI	Carbon Content
A36	36,000	58,000 - 80,000	.26 Maximum

STRUCTURAL I BEAMS

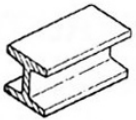


ASTM-A36
58,000/80,000 PSI

Size Inches	Weight Per Foot Lb.	Width of Flange Ins.	Thickness of Web Ins.
3	5.7	2.330	.170
	7.5	2.509	.349
4	7.7	2.660	.190
	9.5	2.796	.326
5	10.0	3.000	.210
	14.75	3.284	.494
6	12.5	3.330	.230
	17.25	3.565	.465
7	15.3	3.660	.250
	20.0	3.860	.450
8	18.4	4.000	.270
	23.0	4.171	.441
10	25.4	4.660	.310
	35.0	4.944	.594
12	31.8	5.000	.350
	35.0	5.078	.428
	40.8	5.250	.460
	50.0	5.477	.687
15	42.9	5.500	.410
	50.0	5.640	.550
18	54.7	6.000	.460
	70.0	6.251	.711
20	66.0	6.250	.795
24	80.0	7.000	.870

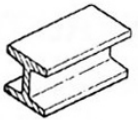
WIDE FLANGE BEAMS

ASTM-A36
58,000/80,000 PSI
Stock Lengths: 20' & 40'



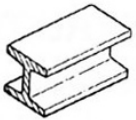
Section Number	Weight Per Foot Pounds	Depth of Section Inches	Flange Width Inches	Flange Thickness Inches	Web Thickness Inches
W4 x	13	4 1/8	4	3/8	1/4
W5 x	16	5	5	3/8	1/4
	19	5 1/8	5	7/16	1/4
W6 x	9	5 7/8	4	3/16	3/16
	12	6	4	1/4	1/4
	16	6 1/4	4	3/8	1/4
W6 x	15	6	6	1/4	1/4
	20	6 1/4	6	3/8	1/4
	25	6 3/8	6 1/8	7/16	5/16
W8 x	10	7 7/8	4	3/16	3/16
	13	8	4	1/4	1/4
	15	8 1/8	4	5/16	1/4
W8 x	18	8 1/8	5 1/4	5/16	1/4
	21	8 1/4	5 1/4	3/8	1/4
W8 x	24	7 7/8	6 1/2	3/8	1/4
	28	8	6 1/2	7/16	5/16
W8 x	31	8	8	7/16	5/16
	35	8 1/8	8	1/2	5/16
	40	8 1/4	8 1/8	9/16	3/8
	48	8 1/2	8 1/8	11/16	3/8
	58	8 3/4	8 1/4	13/16	1/2
	67	9	8 1/4	15/16	9/16
W10 x	12	9 7/8	4	3/16	3/16
	15	10	4	1/4	1/4
	17	10 1/8	4	5/16	1/4
	19	10 1/4	4	3/8	1/4
W10 x	22	10 1/8	5 3/4	3/8	1/4
	26	10 3/8	5 3/4	7/16	1/4
	30	10 1/2	5 3/4	1/2	5/16
W10 x	33	9 3/4	8	7/16	5/16
	39	9 7/8	8	1/2	5/16
	45	10 1/8	8	5/8	3/8
W10 x	49	10	10	9/16	5/16
	54	10 1/8	10	5/8	3/8

WIDE FLANGE BEAMS (con't)



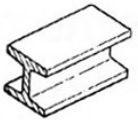
Section Number	Weight Per Foot Pounds	Depth of Section Inches	Flange Width Inches	Flange Thickness Wnches	Web Thickness Inches
	60	10 1/4	10 1/8	11/16	7/16
	68	10 3/8	10 1/8	3/4	1/2
	77	10 5/8	10 1/4	7/8	1/2
	88	10 7/8	10 1/4	1	5/8
	100	11 1/8	10 3/8	1 1/8	11/16
	112	11 3/8	10 3/8	1 1/4	3/4
W12 x	14	11 7/8	4	1/4	3/16
	16	12	4	1/4	1/4
	19	12 1/8	4	3/8	1/4
	22	12 1/4	4	7/16	1/4
W12 x	26	12 1/4	6 1/2	3/8	1/4
	30	12 3/8	6 1/2	7/16	1/4
	35	12 1/2	6 1/2	1/2	5/16
W12 x	40	12	8	1/2	5/16
	45	12	8	9/16	5/16
	50	12 1/4	8 1/8	5/8	3/8
W12 x	53	12	10	9/16	3/8
	58	12 1/4	10	5/8	3/8
W12 x	65	12 1/8	12	5/8	3/8
	72	12 1/4	12	11/16	7/16
	79	12 3/8	12 1/8	3/4	1/2
	87	12 1/2	12 1/8	13/16	1/2
	96	12 3/4	12 1/8	7/8	9/16
	106	12 7/8	12 1/4	1	5/8
	120	13 1/8	12 3/8	1 1/8	11/16
	136	13 3/8	12 3/8	1 1/4	1 3/16
W14 x	22	13 3/4	5	5/16	1/4
	26	13 7/8	5	7/16	1/4
	30	13 7/8	6 3/4	3/8	1/4
	34	14	6 3/4	7/16	5/16
	38	14 1/8	6 3/4	1/2	5/16
W14 x	43	13 5/8	8	1/2	5/16
	48	13 3/4	8	5/8	5/16
	53	13 7/8	8	11/16	3/8

WIDE FLANGE BEAMS (con't)



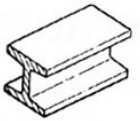
Section Number	Weight Per Foot Pounds	Depth of Section Inches	Flange Width Inches	Flange Thickness Inches	Web Thickness Inches
W14 x	61	13 7/8	10	5/8	3/8
	68	14	10	3/4	7/16
	74	14 1/8	10 1/8	13/16	7/16
	82	14 1/4	10 1/8	7/8	1/1
W14 x	90	14	14 1/2	11/16	7/16
	99	14 1/8	14 5/8	3/4	1/2
	109	14 3/8	14 5/8	7/8	1/2
	120	14 1/2	14 5/8	15/16	9/16
	132	14 5/8	14 3/4	1	5/8
W14 x	145	14 3/4	15 1/2	1 1/16	11/16
	159	15	15 5/8	1 3/16	3/4
	176	15 1/4	15 5/8	1 5/16	13/16
	193	15 1/2	15 3/4	1 7/16	7/8
	211	15 3/4	15 3/4	1 9/16	1
W16 x	26	15 3/4	5 1/2	3/8	1/4
	31	15 7/8	5 1/2	7/16	1/4
W16 x	36	15 7/8	7	7/16	5/16
	40	16	7	1/2	5/16
	45	16 1/8	7	9/16	3/8
	50	16 1/4	7 1/8	5/8	3/8
	57	16 3/8	7 1/8	11/16	7/16
W16 x	67	16 3/8	10 1/4	11/16	3/8
	77	16 1/2	10 1/4	3/4	7/16
	89	16 3/4	10 3/8	7/8	1/2
	100	17	10 3/8	1	9/16
W18 x	35	17 3/4	6	7/16	5/16
	40	17 7/8	6	1/2	5/16
	46	18	6	5/8	3/8
W18 x	50	18	7 1/2	9/16	3/8
	55	18 1/8	7 1/2	5/8	3/8
	60	18 1/4	7 1/2	11/16	7/16
	65	18 3/8	7 5/8	3/4	7/16
	71	18 1/2	7 5/8	13/16	1/2
W18 x	76	18 1/4	11	11/16	7/16
	86	18 3/8	11 1/8	3/4	1/2

WIDE FLANGE BEAMS (con't)



Section Number	Weight Per Foot Pounds	Depth of Section Inches	Flange Width Inches	Flange Thickness Inches	Web Thickness Inches
W18 x	97	18 5/8	11 1/4	15/16	9/16
	106	18 3/4	11 1/4	15/16	9/16
	119	19	11 1/4	1 1/16	5/8
W21 x	44	20 5/8	6 1/2	7/16	3/8
	50	20 7/8	6 1/2	9/16	3/8
	57	21	6 1/2	5/8	3/8
W21 x	62	21	8 1/4	5/8	3/8
	68	21 1/8	8 1/4	11/16	7/16
	73	21 1/4	8 1/4	3/4	7/16
	83	21 3/8	8 3/8	13/16	1/2
	93	21 5/8	8 3/8	15/16	9/16
W21 x	101	21 3/8	12 1/4	13/16	1/2
	111	21 1/2	12 3/8	7/8	9/16
	122	21 5/8	12 3/8	15/16	5/8
	132	21 7/8	12 1/2	1 1/16	5/8
	147	22	12 1/2	1 1/8	3/4
W24 x	55	23 5/8	7	1/2	3/8
	62	23 3/4	7	9/16	7/16
W24 x	68	23 3/4	9	9/16	7/16
	76	23 7/8	9	11/16	7/16
	84	24 1/8	9	3/4	1/2
	94	24 1/4	9 1/8	7/8	1/2
W24 x	104	24	12 3/4	3/4	1/2
	117	24 1/2	12 3/4	7/8	9/16
	131	24 1/2	12 7/8	15/16	5/8
	146	24 3/4	12 7/8	1 1/16	5/8
	162	25	13	1 1/4	11/16
W27 x	84	26 3/4	10	5/8	7/16
	94	26 7/8	10	3/4	1/2
	102	27 1/8	10	13/16	1/2
	114	27 1/4	10 1/8	15/16	9/16
W27 x	146	27 3/8	14	1	5/8
	161	27 5/8	14	1 1/16	11/16
	178	27 3/4	14 1/8	1 3/16	3/4

WIDE FLANGE BEAMS (con't)



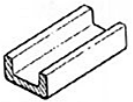
Section Number	Weight Per Foot Pounds	Depth of Section Inches	Flange Width Inches	Flange Thickness Inches	Web Thickness Inches
W 30 x	99	29 5/8	10 1/2	11/16	1/2
	108	29 7/8	10 1/2	3/4	9/16
	116	30	10 1/2	7/8	9/16
	124	30 1/8	10 1/2	15/16	9/16
	132	30 1/4	10 1/2	1	5/8
W 30 x	173	30 1/2	15	1 1/16	5/8
	191	30 5/8	15	1 3/16	11/16
	211	31	15 1/8	1 5/16	3/4
W 33 x	118	32 7/8	11 1/2	3/4	9/16
	130	33 1/8	11 1/2	7/8	9/16
	141	33 1/4	11 1/2	15/16	5/8
	152	33 1/2	11 5/8	1 1/16	5/8
W 33 x	201	33 5/8	15 3/4	1 1/8	11/16
	221	33 7/8	15 3/4	1 1/4	3/4
	241	34 1/4	15 7/8	1 3/8	13/16
W 36 x	135	35 1/2	12	1 3/16	5/8
	150	35 7/8	12	1 5/16	5/8
	160	36	12	1	5/8
	170	36 1/8	12	1 1/8	11/16
	182	36 3/8	12 1/8	1 3/16	3/4
	194	36 1/2	12 1/8	1 1/4	3/4
	210	36 3/4	12 1/8	1 3/8	13/16

JUNIOR BEAMS

ASTM-A36
58,000/80,000 PSI
Stock Lengths: 20s' & 40s'

Size Inches	Weight Per Foot Lb.	Width of Flange Ins.	Thickness of Web Ins.
6	4.4	1.84	.114
8	6.5	2.28	.135
10	9.0	2.69	.155
12	11.8	3.06	.175

BAR SIZE CHANNELS

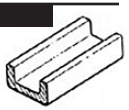


Stock Lengths: 20' 0"
ASTM A-36

Size In Inches					Estimated Weight In Pounds Per Foot	Of 20' Bar
3/4	x	3/8	x	1/8	.56*	11.20
1	x	3/8	x	1/8	.68	13.60
1	x	1/2	x	1/8	.84*	16.80
1 1/8	x	9/16	x	3/16	1.16	23.20
1 1/4	x	1/2	x	1/8	1.01*	20.20
1 1/2	x	1/2	x	1/8	1.12	22.40
1 1/2	x	9/16	x	3/16	1.44	28.80
1 1/2	x	3/4	x	1/8	1.17*	23.40
1 1/2	x	1 1/2	x	3/16	2.65	53.00
1 3/4	x	1/2	x	3/16	1.55	31.00
2	x	1/2	x	1/8	1.76*	35.20
2	x	9/16	x	3/16	1.76*	35.20
2	x	5/8	x	1/4	2.18*	43.60
2	x	1	x	1/8	1.59	31.80
2	x	1	x	3/16	2.32	46.40
2 1/2	x	5/8	x	3/16	2.27	45.40

*Weights may vary, depending on producing mill.

LIGHT WEIGHT CHANNELS

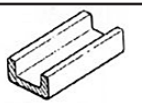


Stair Stringer Channels

A light weight rolled channel designed primarily for stair stringers but also adapable on structural applications where light weight and wide web are desired.
ASTM A-36 58,000/80,000 PSI

Depth Channel Inches	Weight per Foot Lbs.	Web Thickness	Width of Flange
10	6.5	.150	1.125
10	8.4	.170	1.500
12	10.6	.190	1.500

STRUCTURAL CHANNELS



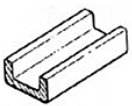
ASTM-A36
58,000/80,000 PSI

Nominal Size Inches	Weight Per Ft. Lb.	Web Thickness	Flange Width Inches
3	4.1	.170	1.410
	5.0	.258	1.498
	6.0	.356	1.596
4	5.4	.180	1.580
	7.25	.320	1.720
5	6.7	.190	1.750
	9.0	.325	1.885
6	8.2	.200	1.920
	10.5	.314	2.034
	13.0	.437	2.157
7	9.8	.210	2.090
	12.25	.314	2.194
	14.75	.419	2.299
8	8.5	.180	1.875
	11.5	.220	2.260
	13.75	.303	2.343
	18.75	.487	2.527

STRUCTURAL CHANNELS (con't)

Nominal Size Inches	Weight Per Ft. Lb.	Web Thickness	Flange Width Inches
9	13.4	.230	2.430
	15.0	.285	2.485
	20.0	.448	2.648
10	15.3	.240	2.600
	20.0	.379	2.739
	25.0	.526	2.886
	30.0	.673	3.033
12	20.7	.280	2.940
	25.0	.387	3.047
	30.0	.510	3.171
15	33.9	.400	3.400
	40.0	.520	3.520
	50.0	.716	3.716

CHANNELS, CAR BUILDING & SHIP BUILDING



ASTM-A36
58,000/80,000 PSI

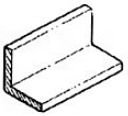
Nominal Size Inches	Weight Per Ft. Lb.	Web Thickness	Flange Width Inches
3	7.1	.312	1.938
4	13.8	.500	2.500
6	12.0	.313	2.500
	15.3	.340	3.500
	16.3	.375	3.000
	18.0	.375	3.500
7	19.1	.350	3.450
	22.7	.500	3.600

CHANNELS, CAR BUILDING & SHIP BUILDING (con't)

Nominal Size Inches	Weight Per Ft. Lb.	Web Thickness	Flange Width Inches
8	18.7	.350	2.975
	20.0	.400	3.025
	21.4	.375	3.450
	22.8	.425	3.500
9	23.9	.400	3.450
	25.4	.450	3.500
10	22.0	.325	3.450
	28.5	.425	3.950
	33.6	.575	4.100
12	31.0	.370	3.670
	35.0	.467	3.767
	40.0	.590	3.890
	45.0	.712	4.012
	50.0	.835	4.135
13	31.8	.375	4.000
	40.0	.560	4.185
	50.0	.787	4.412
18	42.7	.450	3.950
	45.8	.500	4.000
	51.9	.600	4.100
	58.0	.700	4.200

BAR SIZE ANGLES

Stock Lenghts 20' 0"
ASTM A-36



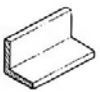
Size In Inches					Weight In Pounds Per Foot	Weight In Pounds Of 20' Bar
1/2	x	1/2	x	1/8	.38	7.60
5/8	x	5/8	x	1/8	.48	9.60
3/4	x	3/4	x	1/8	.59	11.80
7/8	x	7/8	x	1/8	.70	14.00
1	x	5/8	x	1/8	.64	12.80
1	x	3/4	x	1/8	.70	14.00
1	x	1	x	1/8	.80	16.00
				3/16	1.16	23.20
				1/4	1.49	29.80
1 1/8	x	1 1/8	x	1/8	.90	18.00
1 1/4	x	1 1/4	x	1/8	1.01	20.20
				3/16	1.48	29.60
				1/4	1.92	38.40
1 3/8	x	7/8	x	1/8	.91	18.20
				3/16	1.32	26.40
1 1/2	x	1 1/4	x	3/16	1.64	32.80
1 1/2	x	1 1/2	x	1/8	1.23	24.60
				3/16	1.80	36.00
				1/4	2.34	46.80
1 3/4	x	1 1/4	x	1/8	1.23	24.60
				3/16	1.80	36.00
				1/4	2.34	46.80
1 3/4	x	1 3/4	x	1/8	1.44	28.80
				3/16	2.12	42.40
				1/4	2.77	55.40
2	x	1 1/4	x	3/16	1.96	39.20
				1/4	2.55	51.00

BAR SIZE ANGLES (con't)

Size In Inches					Weight In Pounds Per Foot	Weight In Pounds Of 20' Bar
2	x	1 1/2	x	1/8	1.44	28.80
				3/16	2.12	42.40
				1/4	2.77	55.40
2	x	2	x	1/8	1.65	33.00
				3/16	2.44	48.80
				1/4	3.19	63.80
				5/16	3.92	78.40
				3/8	4.70	94.00
2 1/2	x	1 1/2	x	3/16	2.44	48.80
				1/4	3.19	63.80
				5/16	3.92	78.40
2 1/2	x	2	x	3/16	2.75	55.00
				1/4	3.62	72.40
				5/16	4.50	90.00
				3/8	5.30	106.00
2 1/2	x	2 1/2	x	3/16	3.07	61.40
				1/4	4.10	82.00
				5/16	5.00	100.00
				3/8	5.90	118.00
				1/2	7.70	154.00

STRUCTURAL ANGLES

ASTM-A36
58,000/80,000 PSI



Size In Inches					Weight Per Foot In Pounds
3	x	2	x	3/16	3.07
				1/4	4.1
				5/16	5.0
				3/8	5.9
				1/2	7.7
3	x	2 1/2	x	1/4	4.5
				5/16	5.6
				3/8	6.6
				1/2	8.5

STRUCTURAL ANGLES (con't)

Size In Inches					Weight Per Foot In Pounds
3	x	3	x	3/16	3.71
				1/4	4.9
				5/16	6.1
				3/8	7.2
				1/2	9.4
3 1/2	x	2 1/2	x	1/4	4.9
				5/16	6.1
				3/8	7.2
				1/2	9.4
3 1/2	x	3	x	1/4	5.4
				5/16	6.6
				3/8	7.9
				1/2	10.2
3 1/2	x	3 1/2	x	1/4	5.8
				5/16	7.2
				3/8	8.5
				1/2	11.1
4	x	3	x	1/4	5.8
				5/16	7.2
				3/8	8.5
				1/2	11.1
4	x	3 1/2	x	1/4	6.2
				5/16	7.7
				3/8	9.1
				1/2	11.9
4	x	4	x	1/4	6.6
				5/16	8.2
				3/8	9.8
				1/2	12.8
				5/8	15.7
				3/4	18.5
5	x	3	x	1/4	6.6
				5/16	8.2
				3/8	9.8
				1/2	12.8

STRUCTURAL ANGLES (con't)

Size In Inches					Weight Per Foot In Pounds
5	x	3 1/2	x	1/4	7.0
				5/16	8.7
				3/8	10.4
				1/2	13.6
				5/8	16.8
				3/4	19.8
5	x	5	x	5/16	10.3
				3/8	12.3
				1/2	16.2
				5/8	20.0
				3/4	23.6
6	x	3 1/2	x	5/16	9.8
				3/8	11.7
				1/2	15.3
6	x	4	x	5/16	10.3
				3/8	12.3
				1/2	16.2
				5/8	20.0
				3/4	23.6
6	x	6	x	5/16	12.6
				3/8	14.9
				1/2	19.6
				5/8	24.2
				3/4	28.7
				7/8	33.1
				1	37.4
7	x	4	x	3/8	13.6
				1/2	17.9
				5/8	22.1
				3/4	26.2
8	x	4	x	1/2	19.6
				3/4	28.7
8	x	6	x	1/2	23.0
				3/4	33.8
				1	44.2

STRUCTURAL ANGLES (con't)

Size In Inches					Weight Per Foot In Pounds
8	x	8	x	1/2	26.4
				5/8	32.7
				3/4	38.9
				1	51
9	x	4	x	1/2	21.3

HOT ROLLED CARBON STEEL BARS

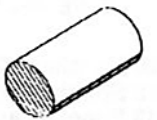
Classifications - Irrespective of shape, hot rolled bars are furnished in either Merchant Bar or Special Bar quality.

Merchant Bar Quality is a term applied to a grade of steel in common use for production and repair work when forging or heat-treating or intricate machining is not required.

Special Bar Quality steel is a higher grade than Merchant Bar quality and commonly used for hammer-forging, heat-treating, cold drawing or other fabrication processes.

HOT ROLLED ROUNDS

M1020 Merchant Bar Quality
Stock Lenghts 20' 0"
ASTM A-36 (for 1/2" and above)



Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
1/4	.167	3.34
5/16	.261	5.22
3/8	.376	7.52
7/16	.511	10.22
1/2	.668	13.36
9/16	.845	16.90
5/8	1.043	20.80
1 1/16	1.262	25.20
3/4	1.502	30.0

HOT ROLLED ROUNDS (con't)

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
1 3/16	1.763	35.2
7/8	2.045	40.8
1 5/16	2.35	47.0
1	2.67	53.4
1 1/16	3.01	60.2
1 1/8	3.38	67.6
1 3/16	3.77	75.4
1 1/4	4.17	83.4
1 5/16	4.60	92.0
1 3/8	5.05	101.0
1 7/16	5.52	110.4
1 1/2	6.01	120.2
1 5/8	7.05	141.0
1 3/4	8.18	163.6
1 7/8	9.39	187.8
2	10.68	213.6
2 1/8	12.06	241.2
2 1/4	13.52	270.4
2 3/8	15.06	301.2
2 1/2	16.69	333.8
2 5/8	18.40	368.0
2 3/4	20.20	404.0
2 7/8	22.07	441.4

M1020 Merchant Quality
1018 Special Quality
1045 Special Quality

1018; Sizes 3" and over-.15/.30 Silicon; 1040-45; .15/.30 Silicon

3	24.03	480.6
3 1/8	26.08	521.6
3 1/4	28.21	564.2
3 3/8	30.42	608.4
3 1/2	32.71	654.2
3 5/8	35.09	701.8
3 3/4	37.55	751.0
3 7/8	40.10	802.0
4	42.73	854.6
4 1/8	45.44	908.8
4 1/4	48.23	964.6
4 3/8	51.11	1022.2

HOT ROLLED ROUNDS (con't)

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
4 1/2	54.08	1081.6
4 5/8	57.12	1142.4
4 3/4	60.25	1205.0
4 7/8	63.46	1269.2
5	66.76	1335.2
5 1/8	70.14	1402.8
5 1/4	73.60	1472.0
5 3/8	77.15	1543.0
5 1/2	80.78	1615.6
5 3/4	88.29	1765.8
6	96.13	1922.6
6 1/8	100.18	2003.6
6 1/4	104.31	2086.2
6 1/2	112.82	2256.4
6 5/8	117.20	2344.0
6 3/4	121.67	2433.4
7	130.85	2617.0
7 1/4	140.36	2807.2
7 1/2	150.21	3004.2
7 3/4	160.39	3207.8
8	170.90	3418.0
8 1/4	181.75	3635.0
8 1/2	192.93	3858.6
8 3/4	204.45	4089.0
9	216.30	4326.0
9 1/4	228.50	4570.0
9 1/2	241.00	4820.0
10	267.04	5340.8

HOT ROLLED SQUARES

M1020 Merchant Bar Quality

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
1/4	.213	4.26
5/16	.332	6.64
3/8	.478	9.56
7/16	.651	13.02
1/2	.850	17.00

HOT ROLLED SQUARES (con't)

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
9/16	1.08	21.60
5/8	1.33	26.60
11/16	1.61	32.20
3/4	1.91	38.20
7/8	2.60	52.00
1	3.40	68.00
1 1/8	4.30	86.00
1 1/4	5.31	106.20
1 3/8	6.43	128.60
1 1/2	7.65	153.00
1 5/8	8.98	179.60
1 3/4	10.41	208.20
1 7/8	11.95	239.00
2	13.60	272.00
2 1/4	17.21	344.20
2 1/2	21.25	425.00
2 3/4	25.71	514.20

HOT ROLLED STRIP Commercial Quality

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
1/8 (.125)		
3/8	.159	3.18
1/2	.213	4.26
5/8	.266	5.32
3/4	.319	6.38
7/8	.372	7.44
1	.425	8.50
1 1/8	.478	9.56
1 1/4	.531	10.62
1 3/8	.584	11.68
1 1/2	.638	12.76
1 5/8	.691	13.82
1 3/4	.744	14.88
2	.850	17.00
2 1/4	.956	19.12
2 1/2	1.062	21.26
2 3/4	1.169	23.38
3	1.275	25.50
3 1/4	1.381	27.62
3 1/2	1.488	29.76

HOT ROLLED STRIP (con't)

Size In Inches	Estimated Weight, Pounds Per Foot	Per 20' Bar
3 3/4	1.594	31.88
4	1.700	34.00
4 1/2	1.913	38.26
5	2.125	42.50
5 1/2	2.338	46.76
6	2.550	51.00
7	2.975	59.50
8	3.400	68.00
9	3.825	76.50
10	4.250	85.00
12	5.100	102.00
3/16 (.1875)		
3/8	.239	4.78
1/2	.319	6.38
5/8	.398	7.96
3/4	.478	9.56
7/8	.558	11.16
1	.638	12.76
1 1/8	.717	14.34
1 1/4	.797	15.94
1 3/8	.877	17.54
1 1/2	.956	19.12
1 3/4	1.116	22.32
1 7/8	1.195	23.90
2	1.275	25.50
2 1/4	1.434	28.68
2 1/2	1.594	31.88
2 3/4	1.753	35.06
3	1.913	38.26
3 1/4	2.072	41.44
3 1/2	2.231	44.62
3 3/4	2.391	47.82
4	2.550	51.00
4 1/2	2.868	57.36
5	3.188	63.76
5 1/2	3.510	71.20
6	3.825	76.50
7	4.460	89.20
8	5.100	102.00
9	5.740	114.80
10	6.380	127.60
12	7.650	153.00

FLATS-HOT ROLLED ASTM A-36

Size In Inches			Estimated Weight, Pounds Per Foot	Of 20' Bar
1/4	x	1/2	.425	8.50
		5/8	.531	10.62
		3/4	.638	12.76
		7/8	.744	14.88
		1	.850	17.00
		1 1/8	.956	19.12
		1 1/4	1.06	21.26
		1 3/8	1.17	23.38
		1 1/2	1.28	25.60
		1 5/8	1.38	27.62
		1 3/4	1.49	29.76
		2	1.70	34.00
		2 1/4	1.91	38.36
		2 1/2	2.13	42.50
		2 3/4	2.34	46.76
		3	2.55	51.00
		3 1/4	2.76	55.26
		3 1/2	2.98	59.50
		3 3/4	3.19	63.76
		4	3.40	68.00
		4 1/4	3.61	72.26
		4 1/2	3.83	76.50
		5	4.25	85.00
		5 1/2	4.68	93.50
		6	5.10	102.00
		6 1/2	5.53	110.60
		7	5.95	119.00
		7 1/2	6.38	127.60
		8	6.80	136.00
5/16	X	1/2	0.531	10.62
		5/8	0.664	13.28
		3/4	0.797	15.94
		7/8	0.930	18.60
		1	1.06	21.26
		1 1/8	1.20	23.90
		1 1/4	1.33	26.56
		1 3/8	1.46	29.22
		1 1/2	1.59	31.88
		1 3/4	1.86	37.18
		2	2.13	42.50
		2 1/4	2.39	47.82
		2 1/2	2.66	53.12
		2 3/4	2.92	58.44
		3	3.19	63.76
		3 1/4	3.45	69.06

FLATS-HOT ROLLED (con't)

Size In Inches			Estimated Weight, Pounds Per Foot	Of 20' Bar
		3 1/2	3.72	74.38
		4	4.25	85.00
		4 1/2	4.78	95.62
		5	5.31	106.26
		5 1/2	5.84	116.80
		6	6.38	127.50
		7	7.44	148.80
		7 1/2	7.97	159.40
		8	8.50	170.00
3/8	x	1/2	.638	12.76
		5/8	.797	15.74
		3/4	.956	19.12
		7/8	1.12	22.32
		1	1.28	25.50
		1 1/8	1.43	28.68
		1 1/4	1.59	31.88
		1 3/8	1.75	35.06
		1 1/2	1.91	38.26
		1 5/8	2.07	41.44
		1 3/4	2.23	44.62
		2	2.55	51.00
		2 1/4	2.87	57.33
		2 1/2	3.19	63.76
		2 3/4	3.51	70.12
		3	3.83	76.50
		3 1/4	4.14	82.88
		3 1/2	4.46	89.26
		4	5.10	102.00
		4 1/2	5.74	114.76
		5	6.38	127.50
		5 1/2	7.01	140.26
		6	7.65	153.00
		7	8.93	178.60
		7 1/2	7.97	159.40
		8	10.20	204.00
7/16	x	1	1.49	29.76
		1 1/4	1.86	37.18
		1 1/2	2.23	44.62
		1 3/4	2.60	52.06
		2	2.98	59.50
		2 1/4	3.35	66.94
		2 1/2	3.72	74.38
		3	4.46	89.26
		3 1/2	5.21	104.12

FLATS-HOT ROLLED (con't)

Size In Inches			Estimated Weight, Pounds Per Foot	Of 20' Bar
		4	5.95	119.00
		5	7.44	148.76
1/2	x	5/8	1.06	21.26
		3/4	1.28	25.50
		7/8	1.49	29.76
		1	1.70	34.00
		1 1/8	1.91	38.26
		1 1/4	2.13	42.50
		1 3/8	2.34	46.76
		1 1/2	2.55	51.00
		1 5/8	2.76	55.26
		1 3/4	2.98	59.50
		2	3.40	68.00
		2 1/4	3.83	76.50
		2 1/2	4.25	85.00
		2 3/4	4.68	93.50
		3	5.10	102.00
		3 1/4	5.53	110.50
		3 1/2	5.95	119.00
		3 3/4	6.38	127.50
		4	6.80	136.00
		4 1/2	7.65	153.00
		5	8.50	170.00
		5 1/2	9.35	187.00
		6	10.20	204.00
		7	11.90	238.00
		8	13.60	272.00
5/8	x	3/4	1.59	31.88
		7/8	1.86	37.18
		1	2.13	42.50
		1 1/8	2.39	47.82
		1 1/4	2.66	53.12
		1 3/8	2.92	57.44
		1 1/2	3.19	63.76
		1 5/8	3.45	69.06
		1 3/4	3.72	74.38
		2	4.25	85.00
		2 1/4	4.78	95.62
		2 1/2	5.31	106.26
		2 3/4	5.84	116.88
		3	6.38	127.50
		3 1/4	6.91	138.12
		3 1/2	7.44	148.76
		4	8.50	170.00

FLATS-HOT ROLLED (con't)

Size In Inches			Estimated Weight, Pounds Per Foot	Of 20' Bar
		4 1/2	9.56	191.26
		5	10.63	212.50
		5 1/2	11.69	233.76
		6	12.75	255.00
		7	14.88	297.50
		8	17.00	340.00
3/4	x	7/8	2.23	44.62
		1	2.55	51.00
		1 1/8	2.87	57.38
		1 1/4	3.19	63.76
		1 1/2	3.83	76.50
		1 5/8	4.14	82.88
		1 3/4	4.46	89.26
		2	5.10	102.00
		2 1/4	5.74	114.76
		2 1/2	6.38	127.50
		2 3/4	7.01	140.26
		3	7.62	153.00
		3 1/4	8.29	165.76
		3 1/2	8.93	178.50
		4	10.20	204.00
		4 1/2	11.48	229.50
		5	12.75	255.00
		5 1/2	14.03	280.50
		6	15.30	306.00
		7	17.85	357.00
		8	20.40	408.00
7/8	x	1	2.98	59.50
		1 1/4	3.72	74.38
		1 3/8	4.09	81.82
		1 1/2	4.46	89.26
		1 3/4	5.21	104.12
		2	5.95	119.00
		2 1/4	6.69	133.88
		2 1/2	7.44	148.76
		2 3/4	8.18	163.62
		3	8.93	178.50
		3 1/4	9.67	193.88
		3 1/2	10.41	208.26
		4	11.90	238.00
		4 1/2	13.39	267.76
		5	14.88	297.50
		5 1/2	16.36	327.20
		6	17.85	357.00

FLATS-HOT ROLLED (con't)

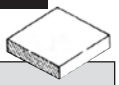
Size In Inches			Estimated Weight, Pounds Per Foot	Estimated Weight, Pounds Of 20' Bar
		7	20.83	416.60
		8	23.80	476.00
1	x	1 1/4	4.25	85.00
		1 1/2	5.10	102.00
		1 3/4	5.95	119.00
1	x	2	6.80	136.00
		2 1/4	7.65	153.00
		2 1/2	8.50	170.00
		2 3/4	9.35	187.00
		3	10.20	205.00
		3 1/4	11.05	221.00
		3 1/2	11.90	238.00
		4	13.60	272.00
		4 1/2	15.30	306.00
		5	17.00	340.00
		5 1/2	18.70	374.00
		6	20.40	408.00
		7	23.80	476.00
		8	27.20	544.00
1 1/8	x	2	7.65	153.00
		2 1/2	9.56	191.26
		3	11.48	229.50
		4	15.30	306.00
		5	19.13	382.60
		6	22.95	459.00
1 1/4	x	1 1/2	6.38	127.50
		1 3/4	7.44	148.76
		2	8.50	170.00
		2 1/4	9.56	191.26
		2 1/2	10.63	212.50
		2 3/4	11.69	233.76
		3	12.75	255.00
		3 1/4	13.81	276.26
		3 1/2	14.88	297.50
		4	17.00	340.00
		4 1/2	19.13	382.50
		5	21.25	425.00
		5 1/2	23.37	467.50
		6	25.50	510.00
		7	29.75	595.00
		8	34.00	680.00
1 1/2	x	1 3/4	8.93	178.60
		2	10.20	204.00

FLATS-HOT ROLLED (con't)

Size In Inches			Estimated Weight, Pounds Per Foot	Estimated Weight, Pounds Of 20' Bar
		2 1/4	11.48	229.60
		2 1/2	12.75	255.00
		2 3/4	14.03	280.60
		3	15.30	306.00
		3 1/2	17.85	357.00
		4	20.40	408.00
		4 1/2	22.95	459.00
		5	25.50	510.00
		5 1/2	28.05	561.00
		6	30.60	612.00
		7	35.70	714.00
		*8	40.80	816.00
1 3/4	x	2	11.90	238.00
		2 1/2	14.88	297.60
		3	17.85	357.00
		3 1/2	20.83	416.60
		4	23.80	476.00
		4 1/2	26.78	535.60
		5	29.25	595.00
		6	35.70	714.00
2	x	2 1/4	15.30	306.00
		2 1/2	17.00	340.00
		3	20.40	408.00
		3 1/2	23.80	476.00
		4	27.20	544.00
		4 1/2	30.60	612.00
		5	34.00	680.00
		*6	48.80	816.00
		*7	47.60	952.00
		*8	54.40	1088.00
2 1/4	x	3	22.95	459.00
2 1/2	x	3	25.50	510.00
		3 1/2	29.75	595.00
		4	34.00	680.00
		4 1/2	38.25	765.00
		*5	42.50	850.00
		*6	51.00	1020.00
		*8	68.00	1360.00
3	x	*4	40.80	816.00
		*4 1/2	45.90	918.00
		*5	51.00	1020.00
		*6	61.20	1224.00

*These sizes are Special Bar Quality.

STEEL PLATES ASTM A-36



Size In Inches			Weight Per Square Foot
3/16	x	36 to 72 48 60 72 84 96	7.66
1/4	x	36 48 60 72 84 96	10.21
5/16	x	36 48 60 72 84 96	12.76
3/8	x	36 48 60 72 84 96	15.32
7/16	x	72 84 96	17.87
1/2	x	36 48 60 72 84 96	20.42
9/16	x	84 96	22.97
5/8	x	36 48	25.53

STEEL PLATES (con't)

Size In Inches			Weight Per Square Foot
5/8		60 72	
3/4	x	48 60 72 84 86	30.63
7/8	x	60 72 84 96	35.74
1	x	48 60 72 84 96	40.84
1 1/4	x	48 60 72 84 96	51.05
1 1/2	x	48 60 72 84 96	61.26
1 3/4	x	60 72 84 96	71.47
2	x	72 84 96	81.68
2 1/4	x	72 84 96	91.89
2 3/8	x	72 84 96	97.00

STEEL PLATES (con't)

Size In Inches			Weight Per Square Foot
2 1/2	x	72 84 96	102.10
2 3/4	x	72 84 96	112.31
3	x	60 72 84 96	122.52
3 1/4	x	60 72 84 96	132.73
3 1/2	x	60 72 84	142.94
3 3/4	x	60 72 84 96	153.15
4	x	60 72 84 96	163.36
4 1/4	x	84 96	173.57
4 1/2	x	60 72 84 96	183.78
4 3/4	x	84 96	193.92
5	x	60 72 84 96	204.20

STEEL PLATES (con't)

Size In Inches			Weight Per Square Foot
5 1/2	x	60 72 84 96	224.62
6	x	60 72 84 96	245.04
6 1/2	x	60 72 84 96	265.46
7	x	60 72 84 96	285.88
7 1/2	x	84 96	306.30
8	x	72 84 96	326.72
8 1/2	x	84 96	347.14
9	x	72 84 96	367.56
9 1/2	x	96	387.98
10	x	60 72 84 96	408.40
*10 5/8	x	96	433.93
*11 5/8	x	96	474.77
12	x	72 84 96	490.08

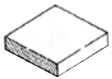
STEEL PLATES (con't)

Size In Inches			Weight Per Square Foot
*12 5/8	x	96	515.61
*13 5/8	x	84	556.45
14	x	72	571.76
*14 5/8	x	84	597.29

*These plates rolled one half Standard Flatness Tolerance.

PLATES — Univesal Mill

Open Hearth Steel
ASTM A-36 Stock Lengths 20'



Size In Inches			Weight Per Foot, Pounds
3/16	x	7 to 12 See H.R. Strip	
1/4	x	9	7.65
		10	8.50
		11	9.350
		11 1/2	9.78
		12	10.20
5/16	x	10	10.63
3/8	x	9	11.48
		10	12.75
		11	14.03
		12	15.30
1/2	x	9	15.30
		10	17.00
		11	18.70
		12	20.40
5/8	x	9	19.13
		10	21.25
		12	25.50
3/4	x	9	22.95
		10	25.50
		12	30.60

PLATES (con't)

Size In Inches			Weight Per Foot, Pounds
1	x	9	30.60
		10	34.00
		12	40.80
1 1/4	x	10	42.50
		12	51.00
1 1/2	x	10	51.00
		12	61.20

STEEL FLOOR PLATE

Four Way

Stock Lengths

18 Ga. – 12'; 16 Ga. to 14 Ga. Incl. – 8', 10', 12', 20'
12 Ga. to 1/8" thick Incl. – 8', 10', 12'
1/16" to 5/8" thick Incl. – 8', 10', 12', 20', 30', 40'

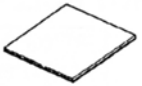
Size In Inches	Weight Per Foot, Pounds
16 Ga. (3.00 lbs. per sq ft)	
30	7.65
36	9.18
48	12.24
14 Ga. (3.75 lbs. per sq ft)	
36	11.49
48	15.32
12 Ga. (5.25 lbs. per sq ft)	
36	16.08
48	21.44
60	26.80
1/8" (6.16 lbs. per sq ft)	
36	18.81
48	25.08
60	31.25
72	37.62

STEEL FLOOR PLATE (con't)

Size In Inches	Weight Per Foot, Pounds
3/16" (8.71 lbs. per sq ft)	
36	26.10
42	30.45
48	34.80
60	43.50
72	52.20
1/4" (11.26 lbs. per sq ft)	
36	33.75
42	39.38
48	45.00
60	56.25
72	67.50
5/16" (13.81 lbs. per sq ft)	
36	41.40
42	48.30
48	55.20
60	69.00
72	82.80
3/8" (16.37 lbs. per sq ft)	
36	49.05
42	57.23
48	65.40
60	81.75
72	98.10
1/2" (21.47 lbs. per sq ft)	
48	85.80
60	107.25
72	128.70
5/8" (26.58 lbs. per sq ft)	
48	106.20
72	159.30
3/4" (31.68 lbs. per sq ft)	
48	126.72
60	158.40
72	190.08

Thickness exclusive of projecting lugs.

HOT ROLLED SHEET STEEL



Commercial Quality Low Carbon
(Manufacturers Standard Gauge)

Gauge Size In Inches			Estimated Weight Per Sheet
No. 7 (3/16")			
Wt. per sq ft 7.50			
36	x	96	180.0
36	x	120	225.0
36	x	144	270.0
48	x	96	240.0
48	x	120	300.0
48	x	144	360.0
60	x	96	300.0
60	x	120	375.0
60	x	144	450.0
60	x	240	750.0
72	x	96	360.0
72	x	120	450.0
72	x	144	540.0
72	x	240	900.0
Over 72" See Plates			
No. 8 (.1644")			
Wt. per sq ft 6.875			
36	x	96	165.0
36	x	120	206.3
48	x	96	220.0
48	x	120	275.0
60	x	120	343.8
No. 10 (.1345")			
Wt. per sq ft 5.625			
36	x	96	135.0
36	x	120	168.8
36	x	144	202.5
48	x	96	180.0
48	x	120	225.0
48	x	144	270.0
48	x	240	450.0
54	x	120	253.1
60	x	96	225.0
60	x	120	281.3

HOT ROLLED SHEET STEEL (con't)

Gauge Size In Inches			Estimated Weight Per Sheet
60	x	144	337.5
60	x	168	393.8
60	x	240	562.5
72	x	96	270.0
72	x	120	337.5
72	x	144	405.0
72	x	192	540.0
No. 11 (.1196")			
Wt. per sq ft 5.00			
36	x	96	120.0
36	x	120	150.0
36	x	144	180.0
42	x	144	210.0
48	x	96	160.0
48	x	120	200.0
48	x	144	240.0
60	x	96	200.0
60	x	120	250.0
60	x	144	300.0
60	x	168	350.0
60	x	192	400.0
72	x	120	300.0
72	x	144	360.0
72	x	192	480.0
No. 12 (.1046")			
Wt. per sq ft 4.375			
36	x	96	105.0
36	x	120	131.3
36	x	144	157.5
42	x	120	153.1
48	x	96	140.0
48	x	120	175.0
48	x	144	210.0
60	x	96	175.0
60	x	120	218.8
60	x	144	262.5
60	x	168	306.3
72	x	96	210.0
72	x	120	262.5
72	x	144	315.0
72	x	192	420.0

HOT ROLLED SHEET STEEL (con't)

Gauge Size In Inches			Estimated Weight Per Sheet
No. 14 (.0747")			
Wt. per sq ft 3.125			
30	x	96	62.5
30	x	120	78.1
36	x	96	75.0
36	x	120	93.8
36	x	144	112.5
42	x	96	87.5
48	x	96	100.0
48	x	120	125.0
48	x	144	150.0
54	x	120	140.6
60	x	96	125.0
60	x	120	156.3
60	x	144	187.5
60	x	168	218.8
60	x	192	250.0
72	x	96	150.0
72	x	120	187.5
72	x	144	225.0
No. 16 (.0598")			
Wt. per sq ft 2.50			
30	x	96	50.0
30	x	120	62.5
36	x	96	60.0
36	x	120	75.0
36	x	144	90.0
42	x	96	70.0
42	x	120	87.5
42	x	144	105.0
48	x	96	80.0
48	x	120	100.0
48	x	144	120.0
No. 16 (.0598")			
Wt. per sq ft 2.50			
48	x	156	130.0
54	x	96	90.0
54	x	120	112.5
60	x	96	100.0
60	x	120	125.0
60	x	144	150.0
60	x	168	175.0
60	x	192	200.0

HOT ROLLED SHEET STEEL (con't)

Gauge Size In Inches			Estimated Weight Per Sheet
No. 18 (.0478")			
Wt. per sq ft 2.00			
30	x	96	40.0
30	x	120	50.0
36	x	96	48.0
36	x	120	60.0
48	x	96	64.0
48	x	120	80.0

CARBON STEEL SHEETS

Standard Gauge and Weight and Thickness Ranges

Sheets specified to a manufacturer's standard gauge number are produced to the inch equivalent for that gauge number as shown below. Sheets specified to unit weight are produced to the corresponding thickness as shown below.

The following table shows the upper and lower limits for unit weight and thickness for each member of the manufacturer's standard gauge table. These ranges are not tolerances.

Mfr's Std. Ga. No.	Ounce per Sq. Ft.	Lb. per Sq. In.	Lb. per Sq. Ft.	In Equivalent for Sheet Thickness	Weight Range Lbs.per Sq. Ft.	Thickness Range Inch
3	160	.069444	10.0000	.2391	10.312-9.688	.2465- .2317
4	150	.065104	9.3750	.2242	9.687-9.063	.2316- .2168
5	140	.060764	8.7500	.2092	9.062-8.438	.2167- .2018
6	130	.0564242	8.1250	.1943	8.437-7.813	.2017- .1869
7	120	.052083	7.5000	.1793	7.812-7.188	.1868- .1719
8	110	.047743	6.8750	.1644	7.187-6.563	.1718- .1570
9	100	.043403	6.2500	.1495	6.562-5.938	.1569- .1420
10	90	.039062	5.6250	.1345	5.937-5.313	.1419- .1271
11	80	.034722	5.0000	.1196	5.312-4.688	.1270- .1121
12	70	.030382	4.3750	.1046	4.687-4.063	.1120- .0972
13	60	.026042	3.7500	.0897	4.062-3.438	.0971- .0822
14	50	.021701	3.1250	.0747	3.437-2.969	.0821- .0710

CARBON STEEL SHEETS (con't)

Mfr's Std. Ga. No.	Ounce per Sq. Ft.	Lb. per Sq. In.	Lb. per Sq. Ft.	In Equivalent for Sheet Thickness	Weight Range Lbs.per Sq. Ft.	Thickness Range Inch
15	45	.019531	2.8125	.0673	2.968-2.657	.0709- .0636
16	40	.017361	2.5000	.0598	2.656-2.375	.0635- .0568
17	36	.015625	2.2500	.0538	2.374-2.125	.0567- .0509
18	32	.013889	2.0000	.0478	2.124-1.875	.0508- .0449
19	28	.012153	1.7500	.0418	1.874-1.625	.0448- .0389
20	24	.010417	1.5000	.0359	1.624-1.438	.0388- .0344
21	22	.0095486	1.3750	.0329	1.437-1.313	.0343- .0314
22	20	.0086806	1.2500	.0299	1.312-1.188	.0313- .0284
23	18	.0078125	1.1250	.0269	1.187-1.063	.0283- .0255
24	16	.0069444	1.0000	.0239	1.062- .938	.0254- .0225
25	14	.0060764	.87500	.0209	.937- .813	.0224- .0195
26	12	.0052083	.75000	.0179	.812- .719	.0194- .0172
27	11	.0047743	.68750	.0164	.718- .657	.0171- .0157
28	10	.0043403	.62500	.0149	.656- .594	.0156- .0142
29	9	.0039062	.56250	.0135	.593- .532	.0141- .0128
30	8	.0034722	.50000	.0120	.531- .469	.0127- .0113
31	7	.0030382	.43750	.0105	.468- .422	.0112- .0101
32	6.5	.0028212	.40625	.0097	.421- .391	.0100- .0094
33	6	.0026042	.37500	.0090	.390- .360	.0093- .0086
34	5.5	.0023872	.34375	.0082	.359- .329	.0085- .0079
35	5	.0021701	.31250	.0075	.328- .297	.0078- .0071
36	4.5	.0019531	.28125	.0067	.296- .274	.0070- .0066
37	4.25	.0018446	.26562	.0064	.273- .258	.0065- .0062
38	4	.0017361	.25000	.0060	.257- .243	.0061- .0058

EXPANDED STEEL MESH FLATTENED

Style Designation	Width In Inches	Length In Inches	Weight Per Sq. Ft.	Approx. Size Of Opening In Inches
1/4 x 20-22	48	96	.83	3/32 x 11/16
1/4 x 18-20	48	96	1.11	3/32 x 11/16
1/2 x 40	48	96	.38	3/8 x 1
1/2 x 20-22	48	96	.40	3/8 x 1
1/2 x 18-20	48	96	.66	9/32 x 1
	48	120	.66	9/32 x 1
1/2 x 16-18	48	96	.82	1/4 x 1
1/2 x 13-15	48	96	1.40	1/4 x 1

EXPANDED STEEL MESH FLATTENED (con't)

Style Designation	Width In Inches	Length In Inches	Weight Per Sq. Ft.	Approx. Size Of Opening In Inches
3/4 x 16-18	48	96	.51	3/4 x 1 3/4
	48	120	.51	3/4 x 1 3/4
3/4 x 14-16	48	96	.63	11/16 x 1 13/16
	48	120	.63	11/16 x 1 13/16
3/4 x 13-15	48	96	.75	11/16 x 1 25/32
3/4 x 9-11	48	96	1.71	9/16 x 1 11/16
1 1/2 x 16-18	48	96	.38	11/16 x 2 3/4
1 1/2 x 14-16	48	96	.46	11/16 x 2 3/4
1 1/2 x 13-15	48	96	.57	11/16 x 2 3/4
1 1/2 x 9-11	48	96	1.14	1 x 2 9/16
	48	120	1.14	1 x 2 9/16

The first number represents the nominal width of diamond in inches; the second number represents the approximate original gauge before flattening and the third number represents the approximate gauge thickness after flattening. Sheets of special size can be furnished.

EXPANDED STEEL MESH — Not Flattened

Style Designation	Width In Inches	Length In Inches	Weight Per Sq. Ft.	Approx. Size Of Opening In Inches
1/4 x 20	36, 48	96	.86	11/64 x 23/32
1/4 x 18	48	96	1.14	11/64 x 23/32
1/2 x 40	48	96	.40	13/32 x 1 5/16
1/2 x 20	48	96	.43	7/16 x 1 5/16
1/2 x 18	36, *48, 72	96	.70	7/16 x 1 5/16
1/2 x 16	*48, 72	96	.86	3/8 x 1 5/16
1/2 x 13	48, 72	96	1.47	5/16 x 1 5/16
3/4 x 16	*48, 72	96	.54	13/16 x 1 3/4
3/4 x 13	*48, 72	96	.80	3/4 x 1 11/16
	48	120	.80	3/4 x 1 11/16
3/4 x 10	48	96	1.20	3/4 x 1 5/8
3/4 x 9	*48	96	1.80	11/16 x 1 9/16
	48	120	1.80	11/16 x 1 9/16
1 1/2 x 16	*48	96	.40	1 1/4 x 2 5/8
1 1/2 x 13	*48, 72	96	.60	1 3/16 x 2 1/2
	72	120	.60	1 3/16 x 2 1/2
1 1/2 x 10	48, 72	96	.79	1 3/16 x 2 1/2
1 1/2 x 9	72, 48	96	1.20	1 1/8 x 2 3/8
	72	120	1.20	1 1/8 x 2 3/8

EXPANDED STEEL MESH (con't)

Style Designation	Width In Inches	Length In Inches	Weight Per Sq. Ft.	Approx. Size Of Opening In Inches
2 x 9	48	96	.90	1 9/16 x 3 3/8

The first number represents the nominal width of diamond in inches and the second number represents the approximate gauge of sheet or plate before expanding except that No. 10 is expanded from approximately No. 13 gauge. Sheets of special size can be furnished.

EXPANDED METAL WALKWAY & SKYWALK

3 lb, 4 lb and 6.25 lb gratings—Walkway, Skyway and Gratings Not Flattened

Style Designation	Width In Inches	Length In Inches	Weight Per Sq. Ft.	Approx. Size Of Opening In Inches
Walkway	48, 72	96	4.27	1 x 2 7/8
Skywalk	48	120	3.14	1 5/8 x 4 7/8
3.0 lb. grating	72	120	3.00	1 5/16 x 3 7/16
4.0 lb. grating	48, 60, 72	96	4.00	1 5/16 x 3 7/16
6.25 lb. grating	48, 72	96	6.25	1 3/16 x 3 3/8

OPEN STEEL FLOOR GRATING—Conforms to

Specifications RR-G-661a and MIL-G- 1958, Maximum Width of Panels 3'0"

Bearing Bars	Type 19-W-4	Type 19-W-2	Type 15-W-4	Type 15-W-2
3/4 x 1/8	3.99	4.63	4.95	5.59
3/4 x 3/16	5.67	6.31	7.11	7.75
1 x 1/8	5.15	5.79	6.44	7.08
1 x 3/16	7.35	7.99	9.27	9.91
1 1/4 x 1/8	6.20	6.84	7.79	8.43
1 1/4 x 3/16	9.03	9.67	11.43	12.07
1 1/2 x 1/8	7.35	7.99	9.27	9.91
1 1/2 x 3/16	10.94	11.80	13.82	14.68
1 3/4 x 3/16	12.62	13.48	15.98	16.84
2 x 3/16	14.30	15.16	18.14	19.00
2 1/4 x 3/16	15.87	16.74	20.16	21.03
2 1/2 x 3/16	17.55	18.42	22.32	23.19

When ordering GRATING, specify

Type of GRATING, Size of BEARING BARS (DEPTH & WIDTH)

Span (direction of bearing bars), dimensions of area, painted or galvanized, smooth or serrated.

When ordering STAIR TREADS, also specify:

Width and Length, Type of Nosing (CHECKER PLATE OR CAST ABRASIVE)

Punching in side plates of standardized dimensions may be altered to suit special conditions.

CONCRETE REINFORCING BARS

New Billet - Deformed Bars

Bar Size Inches	Bar No.	Weight Per Ft. Pounds	Dia. Inches	Area Sq. Inches	Perimeter Inches
1/4" Rd.	2*	.167	.250	.05	.786
3/8" Rd.	3	.376	.375	.11	1.178
1/2" Rd.	4	.668	.500	.20	1.571
5/8" Rd.	5	1.043	.625	.31	1.963
3/4" Rd.	6	1.502	.750	.44	2.356
7/8" Rd.	7	2.044	.875	.60	2.749
1" Rd.	8	2.670	1.000	.79	3.142
1" Sq.	9**	3.400	1.128	1.00	3.544
1 1/8" Sq.	10**	4.303	1.270	1.27	3.990
1 1/4" Sq.	11**	5.313	1.410	1.56	4.430

*No. 2 bars are plain round. Bars **No. 9,10 and 11 are round bars equivalent in area to square bar in size shown.

WIRE FABRIC

Electric Welded, Concrete Reinforcing Mesh

Spacing	Gauge Wire	Wt. Per 100 Square Ft.	Width In Feet	Length of Rolls In Feet
6 x 6	10	21	5	150
6 x 6	8	30	5	150
6 x 6	6	42	5	150
6 x 6	4	58	5	150
4 x 4	10	31	5	150
4 x 4	4	85	5	150

SQUARE TUBING

MECHANICAL AND STRUCTURAL

CARBON STEEL, STOCK LENGHTS: Mechanical-20 ft. random
Structural-20 ft. & 40 ft. random

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
1/2" X 1/2"				
20	.035	.2213	x	.....
18	.049	.3005	x	..
0.063	.063	.3744	x	..
16	.065	.3845	x	..

SQUARE TUBING (con't)

MECHANICAL AND STRUCTURAL

CARBON STEEL

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
5/8" X 5/8"				
20	.035	.2808	x	.....
18	.049	.3838	x	..
16	.065	.4950	x	.....
3/4" x 3/4"				
20	.035	.3403	x	.....
18	.049	.4671	x	..
.063	.063	.5886	x	x
16	.065	.6055	x	..
14	.083	.7529	x	.....
11	.120	1.0280	x	..
7/8" x 7/8"				
18	.049	.5504	x	..
16	.065	.7160	x	..
14	.083	.8940	x	..
1" x 1"				
20	.035	.4593	x	.....
18	.049	.6337	x	..
.063	.063	.8028	x	x
16	.065	.8265	x	..
15	.072	.9086	x	x
.073	.073	.9203	..	x
14	.083	1.0340	x	..
13	.095	1.1690	x	..
12	.109	1.3210	x	.....
11	.120	1.4360	x	x
1-1/8" x 1-1/8"				
18	.049	.7170	x	.....
16	.065	.9370	x	..
1-1/4" x 1-1/4"				
18	.049	.8003	x	.....
.063	.063	1.017	x	x
16	.065	1.048	x	..
15	.072	1.153	..	x
14	.830	1.317	x	.....
13	.095	1.492	x	..
12	.109	1.692	x	..
11	.120	1.844	x	x
.135	.135	2.047	.....	x
3/16	.188	2.400	..	x

SQUARE TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
1-1/2" x 1-1/2"				
18	.049	.9669	x	.....
0.063	.063	1.231	x	x
16	.065	1.269	x	..
15	.072	1.398	x	x
14	.083	1.600	x	x
13	.095	1.815	x	..
12	.109	2.062	x	..
11	.120	2.252	x	x
0.145	.145	2.490	.....	x
3/16	.188	3.040	..	x
1/4	.250	3.700	..	..
1-3/4" x 1-3/4"				
16	.065	1.490	x	.....
14	.083	1.882	x	..
11	.120	2.660	x	..
2" x 2"				
18	.049	1.300	x	.....
0.063	.063	1.670	..	x
16	.065	1.711	x	..
15	.072	1.888	x	x
14	.083	2.164	x	.....
13	.095	2.461	x	..
12	.109	2.803	x	..
11	.120	3.068	x	x
1/8	.125	3.050	.....	x
10	.134	3.250	..	x
7	.180	4.170	..	x
3/16	.188	4.320	..	x
1/4	.250	5.410	..	x
2-1/4" x 2-1/4"				
16	.065	1.932	x	.....
2-1/2" x 2-1/2"				
14	.083	2.728	x	.....
11	.120	3.884	x	x
1/8	.125	3.900	..	x
10	.134	4.310	..	x
7	.180	5.400	..	x
3/16	.188	5.590	.....	x
1/4	.250	7.110	..	x

SQUARE TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
3" x 3"				
14	.083	3.293	.....	x
11	.120	4.700	x	x
1/8	.125	4.750	..	x
7	.180	6.620	..	x
3/16	.188	6.870	.....	x
1/4	.250	8.810	..	x
5/16	.313	10.580	..	x
3/8	.375	12.150	..	x
3-1/2" x 3-1/2"				
1/8	.125	5.610	.....	x
7	.180	8.127	..	x
3/16	.188	8.150	..	x
1/4	.250	10.510	..	x
5/16	.313	12.700	.....	x
4" x 4"				
11	.120	6.332	x	x
1/8	.125	6.460	..	x
7	.180	9.070	..	x
3/16	.188	9.420	..	x
1/4	.250	12.210	.....	x
5/16	.313	14.830	..	x
3/8	.375	17.270	..	x
1/2	.500	21.630	..	x
4 1/2" x 4 1/2"				
3/16	.188	10.700		x
1/4	.250	13.910	..	x
5" x 5"				
1/8	.125	7.970		x
7	.180	11.400	..	x
3/16	.188	11.970	..	x
1/4	.250	15.620	..	x
5/16	.313	19.080		x
3/8	.375	22.370	..	x
1/2	.500	28.430	..	x
6" x 6"				
7	.180	13.900		x
3/16	.188	14.530	..	x

SQUARE TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
1/4	.250	19.02	..	x
5/16	.313	23.34	..	x
3/8	.375	27.48		x
1/2	.500	35.24	..	x
7″ x 7″				
3/16	.188	17.08		x
1/4	.250	22.42	..	x
3/8	.375	32.58	..	x
1/2	.500	42.05	..	x
8″ x 8″				
7	.180	18.70		x
3/16	.188	19.63	..	x
1/4	.250	25.82	..	x
5/16	.313	31.84	..	x
3/8	.375	37.69		x
1/2	.500	48.85	..	x
5/8	.625	59.32	..	x
10″ x 10″				
1/4	.250	32.63		x
5/16	.313	40.35	..	x
3/8	.375	47.90	..	x
1/2	.500	62.46	..	x
5/8	.625	76.33	..	x
12″ x 12″				
1/4	.250	39.43		x
3/8	.375	58.10	..	x
1/2	.500	76.07	..	x
14″ x 14″				
1/2	.500	89.68		x
16″ x 16″				
1/2	.500	103.30		x

RECTANGULAR TUBING

MECHANICAL AND STRUCTURAL
CARBON STEEL, STOCK LENGHTS: Mechanical-20 ft. random
Structural-20 ft. & 40 ft. random

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
1″ x 1/2″ x				
16	.065	.6055	x	
1″ x 3/4″ x				
16	.065	.716	x	
1-1/2″ x 1/2″ x				
16	.065	.8265	x	
1-1/2″ x 3/4″ x				
14	.083	1.176	x	
1-1/2″ x 1 x				
16	.065	1.048	x	
14	.083	1.317	x	..
11	.120	1.844	x	..
2″ x 3/4″ x				
16	.065	1.158	x	
2″ x 1″ x				
16	.065	1.269	x	
15	.072	1.398	x	x
14	.083	1.600	x	..
11	.120	2.252	x	x
2″ x 1-1/4″ x				
14	.083	1.740	x	
2″ x 1-1/2″ x				
14	.083	1.882	x	
11	.120	2.660	x	..
2-1/2″ x 1″ x				
14	.083	1.882	x	
2-1/2″ x 1-1/4″ x				
14	.083	2.023	x	
2-1/2″ x 1-1/2″ x				
14	.083	2.164	x	
11	.125	3.068	x	..
1/8	.125	3.050	..	x
3/16	.188	4.320		x
1/4	.250	5.410	..	x

RECTANGULAR TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
3″ x 3/4″ x				
16	.065	1.600	x	
3″ x 1″ x				
14	.083	2.164	x	
11	.120	3.068	x	
3″ x 1-1/2″ x				
14	.083	2.446	x	
12	.109	3.174	x	..
11	.120	3.476	x	x
1/8	.125	3.480	..	x
3/16	.188	4.960		x
3″ x 2″ x				
14	.083	3.728	x	
11	.120	3.884	x	x
1/8	.125	3.900	..	x
7	.180	5.400	..	x
3/16	.188	5.590		x
1/4	.250	7.110	..	x
5/16	.313	8.430	..	x
3-1/2″ x 2-1/2″ x				
3/16	.188	6.880		x
1/4	.250	10.51	..	x
4″ x 2-1/2″ x				
11	.120	4.292		x
4″ x 2″ x				
14	.083	3.263		x
11	.120	4.700	x	x
1/8	.125	4.750	..	x
7	.180	6.620	..	x
3/16	.188	6.870		x
1/4	.250	8.810	..	x
5/16	.313	10.580	..	x..
4″ x 2-1/2″ x				
1/8	.125	5.175	..	x
4″ x 3″				
1/8	.125	5.610		x
7	.180	7.860	..	x
3/16	.188	8.150	..	x

RECTANGULAR TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
1/4	.250	10.51	..	x
5/16	.313	12.70	..	x
4-1/2″ x 2-1/2″ x				
1/4	.250	10.51		x
5″ x 2″ x				
7	.180	7.840		x
3/16	.188	8.150	..	x
1/4	.250	10.51	..	x
5/16	.3125	12.684	..	x
5″ x 2-1/2″ x				
1/8	.125	5.924		x
3/16	.188	8.880	..	x
5″ x 3″ x				
7	.180	9.070		x
3/16	.188	9.420	..	x
1/4	.250	12.21	..	x
5/16	.313	14.83	..	x
3/8	.375	17.27		x
1/2	.500	21.63	..	x
6″ x 2″ x				
7	.180	8.970		x
3/16	.188	9.420	..	x
1/4	.250	12.21		x
5/16	.3125	14.0808	..	x
6″ x 3″ x				
7	.180	10.20		x
3/16	.188	10.70	..	x
1/4	.250	13.91	..	x
5/16	.313	16.96	..	x
3/8	.375	19.82		x
1/2	.500	25.03	..	x
6″ x 4″ x				
7	.180	11.40		x
3/16	.188	11.97	..	x
1/4	.250	15.62	..	x
5/16	.313	19.08	..	x
3/8	.375	22.37		x
1/2	.500	28.43	..	x

RECTANGULAR TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
7″ x 3″ x				
3/8	.375	22.37		x
7″ x 4″ x				
3/16	.188	13.25		x
1/4	.250	17.32	..	x
3/8	.375	24.93	..	x
7″ x 5″ x				
0.135	.135	10.61		x
7	.180	13.90	..	x
3/16	.188	14.53	..	x
1/4	.250	19.02	..	x
3/8	.375	27.48		x
1/2	.500	35.24	..	x
8″ x 2″ x				
7	.180	13.25		x
3/16	.188	11.97	..	x
1/4	.250	15.62	..	x
5/16	.3125	19.08	..	x
3/8	.375	22.37	..	x
8″ x 3″ x				
3/16	.188	13.25		x
1/4	.250	17.32	..	x
3/8	.375	24.93	..	x
1/2	.500	31.84	..	x
8″ x 4″ x				
7	.180	13.90		x
3/16	.188	14.53	..	x
1/4	.250	19.02	..	x
5/16	.313	23.34	..	x
3/8	.375	27.48		x
1/2	.500	35.24	..	x
8″ x 6″ x				
7	.180	16.20		x
3/16	.188	17.08	..	x
1/4	.250	22.42	..	x
5/16	.313	27.59		x
3/8	.375	32.58		x
1/2	.500	42.05	..	x
9″ x 5″ x				
3/8	.375	32.58		x

RECTANGULAR TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
9″ x 7″ x				
1/4	.250	25.82		x
5/16	.313	31.84	..	x
10″ x 2″ x				
3/16	.188	14.53		x
1/4	.250	19.02	..	x
10″ x 3″ x				
1/4	.250	20.72		x
10″ x 4″ x				
7	.180	16.48		x
3/16	.188	17.08	..	x
1/4	.250	22.42	..	x
3/8	.375	32.58	..	x
1/2	.500	42.05	..	x
10″ x 5″ x				
1/4	.250	24.12		x
10″ x 6″ x				
1/4	.250	25.82		x
5/16	.313	31.84	..	x
3/8	.375	37.69	..	x
1/2	.500	48.85	..	x
10″ x 8″ x				
1/4	.250	29.23		x
3/8	.375	42.79	..	x
1/2	.500	55.66	..	x
12″ x 12″ x				
3/16	.188	17.08		x
12″ x 3″ x				
1/4	.250	24.12		x
12″ x 4″ x				
7	.180	18.70		x
1/4	.250	25.82	..	x
3/8	.375	37.69	..	x
1/2	.500	48.85	..	x

RECTANGULAR TUBING (con't)

Wall Gauge	Wall Decimal	Weight Per Ft. In Lbs.	Mechanical A513	A500 GR. B
12″ x 6″ x				
1/4	.250	29.23		x
3/8	.375	42.79	..	x
1/2	.500	55.66	..	x
12″ x 8″ x				
1/4	.250	32.63		x
3/8	.375	47.90	..	x
1/2	.500	62.46		x

STANDARD BLACK AND GALVANIZED PIPE

Welded-Plain ends and T&C
Specification ASTM-A-120-62T Schedule 40
Can be furnished threaded or threaded and coupled

Nom. Size	Wt. Per Ft.	Wall Thickness	Size O.D.	Size I.D.	Length
1/8″	.24	.068	.405	.269	21 ft.
1/4″	.42	.088	.540	.364	21 ft.
3/8″	.57	.091	.675	.493	21 ft.
1/2″	.85	.109	.840	.622	21 ft.
3/4″	1.13	.113	1.050	.824	21 ft.
1″	1.68	.133	1.315	1.049	21 ft.
1 1/4″	2.27	.140	1.660	1.380	21 ft.
1 1/2″	2.72	.145	1.900	1.610	21 ft.
2″	3.65	.154	2.375	2.067	21 ft.
2 1/2″	5.79	.203	2.875	2.469	21 ft.
3″	7.58	.216	3.500	3.068	21 ft.
3 1/2″	9.11	.226	4.000	3.548	21 ft.
4″	10.79	.237	4.500	4.026	21 ft.
*5″	14.62	.258	5.563	5.047	21 ft.
*6″	18.97	.280	6.625	6.065	21 ft.
*8″	28.55	.322	8.625	7.981	21 ft.
*10″	40.48	.365	10.750	10.020	21 ft.

Also available galvanized *Seamless. ASTM A-53 Gr. B.

EXTRA STRONG BLACK PIPE

Welded-Plain ends and T&C
Specification ASTM-A-120-62T Schedule 80
Can be furnished threaded or threaded and coupled

Nom. Size	Wt. Per Ft.	Wall Thickness	Size O.D.	Size I.D.	Length
3/8″	.74	.126	.675	.423	21 ft.
1/2″	1.09	.147	.840	.546	21 ft.
3/4″	1.47	.154	1.050	.742	21 ft.
1″	2.17	.179	1.315	.957	21 ft.
1 1/4″	3.00	.191	1.660	1.278	21 ft.
1 1/2″	3.63	.200	1.900	1.500	21 ft.
2″	5.02	.218	2.375	1.939	21 ft.
2 1/2″	7.66	.276	2.875	2.323	21 ft.
3″	10.25	.300	3.500	2.900	21 ft.
3 1/2″	12.51	.318	4.000	3.364	21 ft.
4″	14.98	.337	4.500	3.826	21 ft.
*5″	20.78	.375	5.563	4.813	21 ft.
*6″	28.57	.432	6.625	5.761	21 ft.
*8″	43.49	.500	8.625	7.625	21 ft.

Also available galvanized *Seamless. ASTM A-53 Gr. B.

STRUCTURAL PIPE - Black or Galvanized

STRUCTURAL GRADE UNTESTED LIGHT WALL PIPE

The newest addition to the line of quality tubular products is light weight untested continuous butt welded pipe for structural purposes. There are hundreds of important structural applications for which this pipe is ideally suited. This class of material will not be made to any specification, however recognized O.D. pipe tolerances will be maintained. Pipe will be single, random, uniform or cut lengths as ordered, black or galvanized, plain and square cut. This pipe should not be used for conveyance of any fluid.

Size	Ft Wt.	Wall Thickness	Outside Diameter, Inches	Inside Diameter, Inches
1″	1.344#	.104	1.315	1.107
1 1/4″	1.816#	.110	1.660	1.440
1 1/2″	2.176#	.114	1.900	1.672
2″	2.920#	.121	2.375	2.133

COLD DRAWN SQUARES

Size In Inches	Est. Wt. Lbs. Per Ft.	Size In Inches	Est. Wt. Lbs. Per Ft.	Size In Inches	Est. Wt. Lbs. Per Ft.
1/8	.053	1 5/16	2.99	1 3/4	10.41
3/16	.120	1	3.40	1 7/8	11.95
1/4	.213	1 1/16	3.84	2	13.60
5/16	.332	1 1/8	4.30	2 1/8	15.35
3/8	.478	1 3/16	4.80	2 1/4	17.21
7/16	.651	1 1/4	5.31	2 1/2	21.25
1/2	.850	1 5/16	5.86	2 3/4	25.71
9/16	1.08	1 3/8	6.43	3	30.60
5/8	1.33	1 7/16	7.03	3 1/4	35.91
11/16	1.61	1 1/2	7.65	3 1/2	41.65
3/4	1.91	1 9/16	8.30	3 1/4	47.81
1 3/16	2.24	1 5/8	8.98	4	54.40
7/8	2.60	1 11/16	9.68		

Cold finished bars can be furnished in various specifications.

COLD FINISHED ROUNDS

Size In Inches	Est. Wt. Lbs. Per Ft.	Size In Inches	Est. Wt. Lbs. Per Ft.	Size In Inches	Est. Wt. Lbs. Per Ft.
1/8	.042	1 1/2	6.01	3	24.03
3/16	.094	1 9/16	6.52	3 1/8	26.08
1/4	.167	1 5/8	7.05	3 3/16	27.13
5/16	.261	1 11/16	7.60	3 1/4	28.21
3/8	.376	1 3/4	8.18	3 7/16	31.55
7/16	.511	1 13/16	8.77	3 1/2	32.71
1/2	.668	1 7/8	9.39	3 3/4	37.55
9/16	.845	1 15/16	10.02	3 15/16	41.40
5/8	1.04	2	10.68	4	42.73
1 1/16	1.26	2 1/16	11.36	4 3/16	46.83
3/4	1.50	2 1/8	12.06	4 7/16	52.58
1 3/16	1.76	2 3/16	12.78	4 1/2	54.08
7/8	2.04	2 1/4	13.52	4 15/16	65.10
1 5/16	2.35	2 5/16	14.28	5	66.76
1	2.67	2 3/8	15.06	5 1/4	73.60
1 1/16	3.01	2 7/16	15.87	5 7/16	78.95
1 1/8	3.38	2 1/2	16.69	5 1/2	80.78
1 3/16	3.77	2 5/8	18.40	5 3/4	88.29
1 1/4	4.17	2 11/16	19.29	5 15/16	94.14
1 5/16	4.60	2 3/4	20.20	6	96.13
1 3/8	5.05	2 13/16	21.12		
1 7/16	5.52	2 15/16	23.04		

HOT & COLD ROLLED SHEET & STRIP CUT LENGTH & COILS

THICKNESS			WEIGHT		
MSG No.	Sheet Equiv-alent Inches	Order Limit Inches	Pounds Per	Order Limit Pounds Square Foot	MSG No.
4	.2242	.2299 to .2168	9.375	9.618 to 9.063	4
5	.2092	.2167 to .2018	8.750	9.062 to 8.438	5
6	.1943	.2017 to .1869	8.125	8.437 to 7.813	6
7	.1793	.1868 to .1719	7.500	7.812 to 7.188	7
8	.1644	.1718 to .1570	6.875	7.187 to 6.563	8
9	.1495	.1569 to .1420	6.250	6.562 to 5.938	9
10	.1345	.1419 to .1271	5.625	5.937 to 5.313	10
11	.1196	.1270 to .1121	5.000	5.312 to 4.688	11
12	.1046	.1120 to .0972	4.375	4.687 to 4.063	12
13	.0897	.0971 to .0822	3.750	4.062 to 3.438	13
14	.0747	.0821 to .0710	3.125	3.437 to 2.969	14
15	.0673	.0709 to .0636	2.812	2.968 to 2.657	15
16	.0598	.0635 to .0568	2.500	2.656 to 2.375	16
17	.0538	.0567 to .0509	2.250	2.374 to 2.125	17
18	.0478	.0508 to .0449	2.000	2.124 to 1.875	18
19	.0418	.0448 to .0389	1.750	1.874 to 1.625	19
20	.0359	.0388 to .0344	1.500	1.624 to 1.438	20
21	.0329	.0343 to .0314	1.375	1.437 to 1.313	21
22	.0299	.0313 to .0284	1.250	1.312 to 1.188	22
23	.0269	.0283 to .0255	1.125	1.187 to 1.063	23
24	.0239	.0254 to .0225	1.000	1.062 to .938	24
25	.0209	.0224 to .0195	0.875	.937 to .813	25
26	.0179	.0194 to .0172	0.750	.812 to .719	26
27	.0164	.0171 to .0157	0.688	.718 to .657	27
28	.0149	.0156 to .0142	0.625	.656 to .594	28
29	.0135	.0141 to .0128	0.562	.593 to .532	29
30	.0120	.0127 to .0113	0.500	.531 to .469	30

AISI/SAE STEEL COMPOSITIONS

REFERENCE ASTM A29 & SAEJ403

Nonresulphurized Carbon Steels

AISI No*	C	Mn	P Max.	S Max.	SAE No.
1005	.06 max	.35 max	.040	.050	1005
1006	.08 max	.25- .40	.040	.050	1006
1008	.10 max…	.30- .50…	.040…	.050…	1008
1010	.08- .13	.30- .60	.040	.050	1010
1011	.08- .13	.60- .90	.040	.050	-
1012	.10- .15	.30- .60	.040	.050	1012
1013	.11- .16	.50- .80	.040	.050	1013
1015	.13- .18	.30- .60	.040	.050	1015
1016…	.13- .18…	.60- .90…	.040…	.050…	1016
1017	.15- .20	.30- .60	.040	.050	1017
1018	.15- .20	.60- .90	.040	.050	1018
1019	.15- .20	.70-1.00	.040	.050	1019
1020…	.18- .23…	.30- .60…	.040…	.050…	1020
M1020	.17- .24	.25- .60	.040	.050	…
1021	.18- .23	.60- .90	.040	.050	1021
1022	.18- .23	.70-1.00	.040	.050	1022
1023…	.20- .25…	.30- .60…	.040…	.050…	1023
1025	.22- .28	.30- .60	.040	.050	1025
1026	.22- .28	.60- .90	.040	.050	1026
1029	.25- .31	.60- .090	.040	.050	…
1030…	.28- .34…	.60- .90…	.040	.050…	1030
1034	.32- .28	.50- .80	.040	.050	…
1035	.32- .38	.60- .90	.040	.050	1035
1037	.32- .38	.70-1.00	.040	.050	1037
1038	.35- .42	.60- .90	.040	.050	1038
1039…	.37- .44	.70-1.00…	.040…	.050…	1039
1040	.37- .44	.60- .90	.040	.050	1040
1042	.40- .47	.60- .90	.040	.050	1042
1043	.04- .47	.70-1.00	.040	.050	1043
1044…	.43- .50…	.30- .60…	.040...	.050…	1044
M1044	.40- .50	.25- .60	.040	.050	…
1045	.43- .50	.60- .90	.040	.050	1045
1046	.43- .50	.70-1.00	.040	.050	1046
1049…	.46- .53…	.60- .90…	.040…	.050…	1049
1050	.48- .55	.60- .90	.040	.050	1050
1053	.48- .55	.70-1.00	.040	.050	…
1055	.50- .60	.60- .90	.040	.050	1055
1059	.55- .65	.50- .80	.040	.050	1059
1060	.55- .65	.60- .90	.040	.050	1060

AISI No*	C	Mn	P Max.	S Max.	SAE No.
1064	.60- .70	.50- .80	.040	.050	1064
1065	.60- .70	.60- .90	.040	.050	1065
1069	.65- .75	.40- .70	.040	.050	1069
1070	.65- .75	.60- .90	.040	.050	1070
1071…	.65- .70…	.75-1.05…	.040	.050	…
1074	.70- .80	.50- .80	.040	.050	1074
1075	.70- .80	.40- .70	.040	.050	1075
1078	.72- .85	.30- .60	.040	.050	1078
1080	.75- .88	.60- .90	.040	.050	1080
1084…	.80- .93…	.60- .90…	.040…	.050…	1084
1086	.80- .93	.30- .50	.040	.050	1086
1090	.85- .98	.60- .90	.040	.050	1090
1095	.90-1.03	.30- .50	.040	.050	1095
1513	.10- .16	1.10-1.40	.040	.050	1513
1518	.15- .21	1.10-1.40	.040	.050	_
1522	.18- .24	1.10-1.40	.040	.050	1522
1524	.19- .25	1.35-1.65	.040	.050	1524
1525	.23- .29	.80-1.10	.040	.050	_
1526	.22- .29	1.10-1.40	.040	.050	1526
1527	.22- .29	1.20-1.50	.040	.050	1527
1536	.30- .37	1.20-1.50	.040	.050	1536
1541	.36- .44	1.35-1.65	.040	.050	1541
1547	.43- .51	1.35-1.65	.040	.050	_
1548	.44- .52	1.10-1.40	.040	.050	1548
1551	.45- .56	.85-1.15	.040	.050	1551
1552…	.47- .55…	1.20-1.50…	.040…	.050…	1552
1561	.55- .65	.75-1.05	.040	.050	1561
1566	.60- .71	.85-1.15	.040	.050	1566
1572	.65- .76	1.00-1.30	.040	.050	_

*Prefix M denotes merchant quality grades with wider carbon and manganese ranges than standard steels.

When silicon is required, the following ranges and limits are commonly used for basic open-hearth steel grades:

Standard Steel Designation	Silicon Ranges or Limits
Up to 1015 excl.	0.10 max.
1015 to 1025 incl.	0.10 max., 0.10/0.20, or 0.15/0.35
Over 1025	0.10/0.20, or 0.15/0.35

When lead or copper are required, they are added elements to a standard steel. Lead is generally added in amounts ranging from 0.15 to 0.35%.

Resulpharized Carbon Steels Heat Chemical Ranges & Limits

AISI No*	C	Mn	P Max.	S Max.	SAE No.
1108	.08-.13	.60- .80	.040	.08-.13	1108
1110	.08-.13	.30- .60	.040	.08-.13	1110
1117	.14- .20	1.00- 1.30	.040	.08-.13	1117
1116	.14- .20	1.10- 1.40	.040	.16-.23	_
1118..	.14- .20..	1.30- 1.60..	.040..	.08-.13	..1118
1119	.14- .20	1.00- 1.30	.040	.24-.33	_
1137	.32-.39	1.35- 1.65	.040	.08-.13	1137
1139	.35- .43	1.35- 1.65	.040	.13-.20	1139
1140	.37- .44	.70- 1.00	.040	.08-.13	1140
1141	.37- .45	1.35- 1.65	.040	.08-.13	1141
1144…	.40- .48..	1.35- 1.65..	.040	.24-.33	..1144
1145	.42- .49	.70- 1.00	.040	.04-.07	_
1146	.42- .49	.70- 1.00	.040	.08-.13	1146
1151…	.48- .55..	.70- 1.00..	.040..	.08-.03	1151

Rephosphorized and Resulphurized Carbon Steels Heat Chemical Ranges & Limits

AISI No*	C	Mn	P	S	Pb	SAE No.
1211	13 max.	.60- .90	.07-.12	.10-.15	….	1211
1212	13 max.	.70-1.00	.07-12	.16-.23	….	1212
1213	13 max.	.70-1.00	.07-.12	.24-.33	….	1213
12L13	13 max.	.70-1.00	.07-.12	.24-.33	.15-.35	_
1215	.09 max	.75-1.05	.04-.09	.26-.35	….	1215
12L14	15 max.	.85-1.15	.04-.09	.26-.35	.15-.35	12L14
12L15 (ledloy 300)	.09 max.	.75-1.05	.04-.09	.26-.35	.15-.35	_

*All are basic open hearth or oxygen process steels.

When lead or copper are required, they are added elements to a standard steel. Lead is generally added in amounts ranging from 0.15 to 0.35%. Such a steel is identified by inserting the letter "L" between the second and third numbers of the AISI number (example 12L14).

SILICON. It is not a common practice to produce rephosphorized and resulphurized steels to specific limits for silicon because of its adverse effect on machinibility, but when silicon is required, the following ranges and limits are commonly used for basic open hearth steel grades:

Standard Steel Designation	Silicon Ranges or Limits
Up to 1110 incl.	0.10 max.
1116 and Over	0.10 max., 0.10/0.20, or 0.15/0.30

Mechanical Tubing Seamless, Welded and D.O.M.

Low Carbon-Open Hearth

AISI No	C**	Mn	P Max.	S Max.
1010	.05-.15	.30- .060	.040	.050
1018	.15-.20	.60- .90	.040	.050
1020	.15-.25	.30- .90	…	…
1026	.21-.28	.60- .90	…	…
4140/42†	.38/.45	.70-1.00		

** Carbon limits are minimum and maximum on check analysis, while the other elements are subject to AISI Standard Variations for check analyses.

† Additional elements include: Silicone-.15/.35, chromium-.80/

PIPE REFERENCE SCHEDULE

Pipe Size	0.0 In Inches	5	10	20	30	40	STD.	60	80	E.H.	100	120	140	160	DBLE E.H.
1/8	.405	.035	.049			.068	.068		.095	.095					
		.14	.19			.24	.24		.31	.31					
1/4	.540	.049	.085			.088	.088		.119	.119					
		.26	.33			.42	.42		.54	.54					
3/8	.675	.049	.035			.091	.091		.126	.126					
		.33	.42			.57	.57		.74	.74					
1/2	.840	.065	.083			.109	.109		.147	.147				.188	.294
		.54	.67			.85	.85		1.09	1.09				1.31	1.71
3/4	1.050	.065	.083			.113	.113		.154	.154				.219	.308
		.68	.86			1.13	1.13		1.47	1.47				1.94	2.44
1	1.313	.065	.109			.133	.133		.179	.179				.250	.358
		.87	1.40			1.68	1.68		2.17	2.17				2.84	3.66
1 1/4	1.660	.065	.109			.140	.140		.191	.191				.250	.382
		1.11	1.81			2.27	2.27		3.00	3.00				3.76	5.21
1 1/2	1.960	.065	.109			.145	.145		.200	.200				.281	.400
		1.27	2.08			2.72	2.72		3.63	3.63				4.86	6.41
2	2.375	.065	.109			.154	.154		.218	.218				.344	.438
		1.60	2.61			3.65	3.65		5.02	5.02				7.46	9.03
2 1/2	2.875	.083	.125			.203	.203		.276	.276				.375	.552
		2.47	3.07			5.79	5.79		7.66	7.66				10.01	13.69
3	3.500	.083	.126			.218	.218		.300	.300				.438	.600
		3.03	4.51			7.58	7.58		10.25	10.25				14.32	18.58
3 1/2	4.000	.083	.126			.226	.226		.318	.318					.638
		3.47	5.17			9.11	9.11		12.50	12.50					22.85
4	4.50	.083	.125			.237	.237	.281	.337	.337		.438		.531	.674
		3.92	5.84			10.79	10.79	12.66	14.98	14.98		19.00		22.51	27.54
4 1/2	5.000					.247	.247		.355	.355					.710
						12.54	12.54		17.61	17.61					32.53
5	5.563	.109	.134			2.58	2.58		.375	.375		.500		.625	.750
		6.350	7.77			14.62	14.62		20.78	20.78		27.04		32.96	38.55
6	6.625	.109	.134			.280	.280		.432	.432		.562		7.19	.864
		7.59	9.29			18.97	18.97		28.57	28.57		36.39		45.35	53.16
7	7.626						.301			.500					.875
							23.54			38.05					63.08
8	8.625	.109	.148	.250	.277	.322	.322	.406	.500	.500	.594	.719	.812	.906	.875
		9.91	13.40	22.36	24.70	28.55	28.55	35.64	43.39	43.39	50.95	60.71	67.76	74.69	72.42
9	9.625						.342			.500					
							33.91			48.73					
10	10.750	.134	.165	.250	.307	.365	.385	.500	.594	.500	.719	.844	1.000	1.125	1.000
		15.19	18.65	28.04	34.24	40.48	40.48	54.74	64.43	54.74	77.03	89.29	104.13	115.64	104.13
11	11.750						.375			.500					
							45.56			60.08					
12	12.750	.158	.188	.250	.330	.406	.375	.582	.688	.500	.844	1.000	1.125	1.312	1.000
		20.98	25.22	33.38	43.77	53.52	49.56	73.15	88.63	65.42	107.32	125.49	139.67	160.27	125.49
14	14.000		.250	.312	.375	.438	.375	.594	.750	.500	.938	1.094	1.250	1.408	
			36.71	45.61	54.57	63.44	54.57	85.05	106.13	72.09	130.85	150.79	170.21	189.11	
16	16.00		.250	.312	.375	.500	.375	.656	.844	.500	1.031	1.219	1.438	1.594	
			42.05	52.27	62.58	82.77	62.58	107.50	136.61	82.77	164.82	192.43	223.64	245.25	

C. HENRY STEEL

PIPE REFERENCE SCHEDULE

Pipe Size	0.0 In Inches	5	10	20	30	40	STD.	60	80	E.H.	100	120	140	160	DBLE E.H.
18	18.000		.250 47.39	.312 58.94	.375 82.15	.500 104.67	.375 70.59	.656 158.170	.844 170.92	.500 93.45	1.156 207.96	1.375 244.14	1.582 274.22	1.781 308.5	
20	20.000		.250 52.73	.375 78.60	.500 104.13	.594 123.11	.375 78.60	.812 166.40	1.031 208.87	.500 104.13	1.281 256.10	1.500 296.37	1.750 341.09	1.969 379.17	
22	22.000		.250 58.07	.375 86.61	.500 114.81		.375 86.61	.875 197.41	1.125 250.81	.500 114.81	1.375 302.88	1.625 353.61	1.875 403.00	2.125 451.06	
24	24.000		.250 63.41	.375 94.62	.582 140.69	.688 171.29	.375 94.62	.969 238.35	1.219 296.58	.500 125.49	1.531 367.39	1.812 429.39	2.062 483.12	2.344 542.13	
26	26.000		.312 85.60	.500 136.17			.375 102.63			.500 136.17					
28	28.000		.312 92.26	.500 146.85	.625 182.73		.375 110.64			.500 146.850					
30	30.000		.312 98.93	.500 157.53	.625 196.08		.375 118.65			.500 157.530					
32	32.000		.312 105.59	.500 168.21	.625 209.43	.688 230.08	.375 126.66			.500 168.210					
34	34.000		.312 112.25	.500 178.89	.625 222.78	.688 244.77	.375 134.67			.500 178.890					
36	36.000		.312 118.92	.500 189.57	.625 236.13	.750 282.35	.375 142.68			.500 189.570					
38	38.000						.375 150.69			.500 200.250					
40	40.000						.375 158.70			.500 210.93					
42	42.000						.375 166.71			.500 221.610					
48	48.000						.375 190.74			.500 253.65					
54	54.000						.375 214.77			.500 285.69					
60	60.000						.375 238.80			.500 317.73					

INCHES - Pipe size inches
Upper figure - Wall thickness in inches
Lower figure - Weight per foot in lbs.

METRIC CONVERSION FORMULA:
1″ = 2.54 centimeters
1 lb. = .454 kilograms

Information and data herein are typical of average values and are not a guarantee of values. Data and illustrations are intended solely for the purpose of illustration and are intended as warranties, either expressed or implied, of illness for these or other purposes.

CONVERSION TABLE OF INCHES INTO DECIMALS OF A FOOT

0	1	2	3	4	5	6	7	8	9	10	11	
0	0.0000	0.0833	0.1667	0.2500	0.3333	0.4167	0.5000	0.5833	0.6667	0.7500	0.8333	0.9167	0
1/32	0.0026	0.0829	0.1693	0.2526	0.3359	0.4193	0.5026	0.5859	0.6693	0.7526	0.8359	0.9163	1/32
1/16	0.0052	0.0885	0.1719	0.2552	0.3385	0.4219	0.5052	0.5885	0.6719	0.7552	0.8385	0.9291	1/16
3/32	0.0078	0.0911	0.1745	0.2578	0.3411	0.4245	0.5078	0.5911	0.6745	0.7578	0.8411	0.9245	3/32
1/8	0.0104	0.0938	0.1771	0.2604	0.3438	0.4271	0.5104	0.5938	0.6771	0.7604	0.8438	0.9271	1/8
5/32	0.0130	0.0964	0.1797	0.2630	0.3464	0.4297	0.5130	0.5964	0.6797	0.7630	0.8464	0.9297	5/32
3/16	0.0156	0.0990	0.1823	0.2656	0.3490	0.4323	0.5156	0.5990	0.6823	0.7656	0.8490	0.9323	3/16
7/32	0.0182	0.1016	0.1849	0.2682	0.3516	0.4349	0.5182	0.6016	0.6849	0.7682	0.8516	0.9349	7/32
1/4	0.0208	0.1042	0.1875	0.2708	0.3542	0.4375	0.5208	0.6042	0.6875	0.7708	0.8542	0.9375	1/4
9/32	0.0234	0.1068	0.1901	0.2734	0.3568	0.4401	0.5234	0.6068	0.6901	0.7734	0.8568	0.9401	9/32
5/16	0.0260	0.1094	0.1927	0.2760	0.3594	0.4427	0.5260	0.6094	0.6927	0.7760	0.8594	0.9427	5/16
11/32	0.0286	0.1120	0.1953	0.2786	0.3620	0.4453	0.5286	0.6120	0.6953	0.7786	0.8620	0.9453	11/32
3/8	0.0313	0.1146	0.1979	0.2813	0.3646	0.4479	0.5313	0.6146	0.6979	0.7813	0.8646	0.9479	3/8
13/32	0.0339	0.1172	0.2005	0.2839	0.3672	0.4505	0.5539	0.6172	0.7005	0.7839	0.8672	0.9505	13/32
7/16	0.0365	0.1198	0.2031	0.2865	0.3698	0.4531	0.5365	0.6198	0.7031	0.7865	0.8698	0.9531	7/16
15/32	0.0391	0.1224	0.2057	0.2891	0.3724	0.4557	0.5391	0.6224	0.7057	0.7891	0.8724	0.9557	15/32
1/2	0.0417	0.1250	0.2083	0.2917	0.3750	0.4583	0.5417	0.6250	0.7083	0.7917	0.8750	0.9583	1/2
17/32	0.0443	0.1276	0.2109	0.2943	0.3776	0.4609	0.5443	0.6276	0.7109	0.7943	0.8776	0.9609	17/32
9/16	0.0469	0.1302	0.2135	0.2969	0.3802	0.4635	0.5469	0.6302	0.7135	0.7969	0.8802	0.9635	9/16
19/32	0.0465	0.1328	0.2161	0.2995	0.3828	0.4661	0.5495	0.6328	0.7161	0.7995	0.8828	0.9661	19/32
5/8	0.0521	0.1354	0.2188	0.3021	0.3854	0.4688	0.5521	0.6354	0.7188	0.8021	0.8854	0.9688	5/8
21/32	0.0547	0.1380	0.2214	0.3047	0.3880	0.4714	0.5547	0.6380	0.7214	0.8047	0.8880	0.9714	21/32
11/16	0.0573	0.1406	0.2240	0.3073	0.3906	0.4740	0.5573	0.6406	0.7240	0.8073	0.8906	0.9740	11/16
23/32	0.0599	0.1432	0.2266	0.3099	0.3932	0.4766	0.5599	0.6432	0.7266	0.8099	0.8932	0.9766	23/32
3/4	0.0625	0.1458	0.2292	0.3125	0.3958	0.4792	0.5625	0.6458	0.7292	0.8125	0.8958	0.9762	3/4
25/32	0.0651	0.1484	0.2318	0.3151	0.3984	0.4818	0.5651	0.6484	0.7318	0.8151	0.8984	0.9818	25/32
13/16	0.0677	0.1510	0.2344	0.3177	0.4010	0.4844	0.5677	0.6510	0.7344	0.8177	0.9010	0.9844	13/16
27/32	0.0703	0.1536	0.2370	0.3203	0.4036	0.4870	0.5703	0.6536	0.7370	0.8203	0.9036	0.9870	27/32
7/8	0.0729	0.1563	0.2396	0.3229	0.4063	0.4896	0.5729	0.6563	0.7396	0.8229	0.9063	0.9896	7/8
29/32	0.0755	0.1589	0.2422	0.3255	0.4089	0.4922	0.5755	0.6589	0.7422	0.8255	0.9089	0.9922	29/32
15/16	0.0781	0.1615	0.2448	0.3281	0.4115	0.4948	0.5781	0.6615	0.7448	0.8281	0.9115	0.9948	15/16
31/32	0.0807	0.1641	0.2474	0.3307	0.4141	0.4974	0.5807	0.6641	0.7474	0.8307	0.9141	0.9974	31/32
	0	1	2	3	4	5	6	7	8	9	10	11	