



NORFOLK IRON AND METAL

Dear Customer,

Since 1908 Norfolk Iron & Metal Company has been dedicated to you, our customers. For over 100 years, we have continually grown and expanded to better meet your steel requirements. To provide the service that you desire, we have combined advantages of a very large inventory, a modern warehouse facility with state-of-the-art processing equipment and a multi-million dollar truck fleet.

As an independently owned company, we must be responsive to all your needs whether large or small. It is our goal to supply you in a timely manner with highly competitive prices on all your steel requirements. Thank you for your past and future business. I am sure that our relationship will be long and pleasant.

Your comments and suggestions are always appreciated. If you are ever in the Norfolk area, we hope that you will visit our facilities.

Sincerely,

NORFOLK IRON AND METAL

A handwritten signature in black ink that reads "Richard A. Robinson".

Richard A. Robinson
President

THIS BOOK IS THE PERSONAL PROPERTY OF:

NAME

ADDRESS

TELEPHONE

GENERAL INFORMATION

ALL PRODUCTS ARE NOT AVAILABLE AT ALL LOCATIONS

ALL DIMENSIONS AND WEIGHTS IN THIS BOOK ARE SUBJECT TO
MILL SPECIFICATIONS AND TOLERANCES

INQUIRE REGARDING ANY SIZES OR GRADES NOT LISTED

PIPE			
Dimensions and Weights are Nominal			
<u>Permissible Variation</u>		<u>Over</u>	<u>Under</u>
Weight		5%	5%
Outside Diameter:	1/8" to 1 1/2"	1/64"	1/32"
	2" and larger	1%	1%
Wall Thickness		—	12.5%

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BLACK PLAIN END PIPE

Tested Line Pipe – Schedule 40 – Standard Wgt.



Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1/8	.405	.269	.068	.24
1/4	.540	.364	.088	.42
3/8	.675	.493	.091	.57
1/2	.840	.622	.109	.85
3/4	1.050	.824	.113	1.13
1	1.315	1.049	.133	1.68
1 1/4	1.660	1.380	.140	2.27
1 1/2	1.900	1.610	.145	2.72
2	2.375	2.067	.154	3.65
2 1/2	2.875	2.469	.203	5.79
3	3.500	3.068	.216	7.58
3 1/2	4.000	3.548	.226	9.11
4	4.500	4.026	.237	10.79
5	5.563	5.047	.258	14.62
6	6.625	6.065	.280	18.97
8	8.625	7.981	.322	28.55
10	10.750	10.020	.365	40.48
12	12.750	12.000	.375	49.56

BLACK T/C PIPE

Tested – Schedule 40 – Standard Weight



Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1/8	.405	.269	.068	.24
1/4	.540	.364	.088	.42
3/8	.675	.493	.091	.57
1/2	.840	.622	.109	.85
3/4	1.050	.824	.113	1.13
1	1.315	1.049	.133	1.68
1 1/4	1.660	1.380	.140	2.28
1 1/2	1.900	1.610	.145	2.73
2	2.375	2.067	.154	3.68
2 1/2	2.875	2.469	.203	5.79
3	3.500	3.068	.216	7.58
3 1/2	4.000	3.548	.226	9.11
4	4.500	4.026	.237	10.79
5	5.563	5.047	.258	14.62
6	6.625	6.065	.280	18.97

GALVANIZED T/C PIPE
 Tested – Schedule 40 – Standard Weight



Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1/8	.405	.269	.068	.24
1/4	.540	.364	.088	.42
3/8	.675	.493	.091	.57
1/2	.840	.622	.109	.85
3/4	1.050	.824	.113	1.13
1	1.315	1.049	.133	1.68
1 1/4	1.660	1.380	.140	2.28
1 1/2	1.900	1.610	.145	2.73
2	2.375	2.067	.154	3.68
2 1/2	2.875	2.469	.203	5.82
3	3.500	3.068	.216	7.62
3 1/2	4.000	3.548	.226	9.11
4	4.500	4.026	.237	10.79
5	5.563	5.047	.258	14.62
6	6.625	6.065	.280	18.97

EXTRA HEAVY BLACK PIPE P.E.

Tested – Schedule 80



Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1/8	.405	.215	.095	.31
1/4	.540	.302	.119	.54
3/8	.675	.423	.126	.73
1/2	.840	.546	.147	1.09
3/4	1.050	.742	.154	1.47
1	1.315	.957	.179	2.17
1 1/4	1.660	1.278	.191	3.00
1 1/2	1.900	1.500	.200	3.63
2	2.375	1.939	.218	5.02
2 1/2	2.875	2.323	.276	7.66
3	3.500	2.900	.300	10.25
3 1/2	4.000	3.364	.318	12.51
4	4.500	3.826	.337	14.98
5	5.563	4.813	.375	20.78
6	6.625	5.761	.432	28.57
8	8.625	7.625	.500	43.39

ROUND MECHANICAL TUBING

ASTM Grade A-513



Size (OD)	Gauge	Lbs./Ft.	Size (OD)	Gauge	Lbs./Ft.		
.750" (3/4")	16 Ga.	.476	1.500" (1 1/2") (cont.)	11 Ga.	1.769		
	15 Ga.	.521		1.625" (1 5/8")	16 Ga.	1.083	
	14 Ga.	.591			15 Ga.	1.194	
.840"	12 Ga.	.850	14 Ga.		1.357		
	.875" (7/8")	12 Ga.	.850	12 Ga.	1.765		
16 Ga.		.562	11 Ga.	1.929			
15 Ga.		.618	1.660"	16 Ga.	1.107		
14 Ga.		.702		15 Ga.	1.221		
12 Ga.		.892		14 Ga.	1.398		
11 Ga.	.968	12 Ga.		1.806			
1.000" (1")	16 Ga.	.649	11 Ga.	1.974			
	15 Ga.	.714	(P.S.) (1 1/4")	.140 Wall	2.270		
	14 Ga.	.813		1.750" (1 3/4")	16 Ga.	1.107	
	13 Ga.	.918			15 Ga.	1.290	
	12 Ga.	1.037			14 Ga.	1.478	
	11 Ga.	1.128			13 Ga.	1.679	
1.050"	16 Ga.	.684			12 Ga.	1.910	
	15 Ga.	.752	11 Ga.		2.089		
	14 Ga.	.857	1.900"	16 Ga.	1.274		
	12 Ga.	1.100		15 Ga.	1.406		
	11 Ga.	1.192		14 Ga.	1.611		
(P.S.) (3/4")	.113 Wall	1.130		12 Ga.	2.085		
	1.250" (1 1/4")	16 Ga.		.823	11 Ga.	2.281	
		15 Ga.	.906	(P.S.) (1 1/2")	.145 Wall	2.720	
		14 Ga.	1.034		2.000" (2")	16 Ga.	1.343
		13 Ga.	1.172			15 Ga.	1.483
12 Ga.		1.328	14 Ga.			1.699	
11 Ga.	1.448	12 Ga.	2.201				
1.315" (1 5/16")	16 Ga.	.868	11 Ga.	2.409			
	15 Ga.	.956	2.375" (2 3/8")	16 Ga.	1.604		
	14 Ga.	1.092		15 Ga.	1.771		
	12 Ga.	1.404		14 Ga.	2.032		
	11 Ga.	1.532		12 Ga.	2.638		
(P.S.) (1")	.133 Wall	1.680		11 Ga.	2.890		
	1.500" (1 1/2")	16 Ga.	.996	(P.S.) (2")	.154 Wall	3.650	
15 Ga.		1.098	2.500" (2 1/2")		16 Ga.	1.690	
14 Ga.		1.256			15 Ga.	1.867	
13 Ga.		1.426					
12 Ga.		1.619					

ROUND MECHANICAL TUBING

ASTM Grade A-513



Size (OD)	Gauge	Lbs./Ft.	Size (OD)	Gauge	Lbs./Ft.
2.500" (2 1/2") (continued)	14 Ga.	2.143	2.750" (2 3/4") (continued)	15 Ga.	2.059
	12 Ga.	2.783		14 Ga.	2.364
	11 Ga.	3.050		12 Ga.	3.075
2.625" (2 5/8")	16 Ga.	1.777	2.875" (2 7/8")	11 Ga.	3.371
	15 Ga.	1.963		14 Ga.	2.480
	14 Ga.	2.253		12 Ga.	3.220
	12 Ga.	2.929		11 Ga.	3.530
	11 Ga.	3.210		3/16"	5.400
2.750" (2 3/4")	16 Ga.	1.864	(P.S.) (2 1/2")	.203 Wall	5.790

NOTE: (P.S.) indicates pipe size tube.

ROUND TUBING

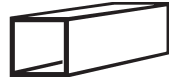


Size (OD)	Gauge	Lbs./Ft.	Size (OD)	Gauge	Lbs./Ft.
3"	14 Ga.	2.60	5"	14 Ga.	4.00
	12 Ga.	3.30		12 Ga.	5.60
	11 Ga.	3.70		10 Ga.	7.20
	10 Ga.	4.20		3/16"	9.60
3 1/2"	14 Ga.	2.80	(P.S.) (5")	.258 Wall	14.62
	12 Ga.	3.90	6"	*14 Ga.	4.80
	11 Ga.	4.30		12 Ga.	6.80
	10 Ga.	5.00		10 Ga.	8.60
(P.S.) (3")	.216 Wall	3/16"		11.60	
4"	*14 Ga.	3.20	6 5/8"	*14 Ga.	5.40
	12 Ga.	4.50		12 Ga.	7.90
	11 Ga.	4.90		10 Ga.	9.60
	10 Ga.	5.70		3/16"	12.90
	3/16"	7.60		(P.S.) (6")	.280 Wall
4 1/2"	14 Ga.	3.60	7"	14 Ga.	5.70
	12 Ga.	5.00		12 Ga.	7.90
	11 Ga.	5.60		10 Ga.	10.10
	10 Ga.	6.40		3/16"	13.60
	3/16"	8.60		8"	*14 Ga.
(P.S.) (4")	.237 Wall	10.79			

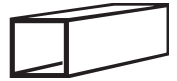
ROUND TUBING

Size (OD)	Gauge	Lbs./Ft.	Size (OD)	Gauge	Lbs./Ft.
8" (continued)	*12 Ga.	9.00	12"	12 Ga.	13.60
	*11 Ga.	10.30		10 Ga.	17.50
	10 Ga.	11.60		3/16"	23.70
	3/16"	15.60		1/4"	31.40
8 5/8"	12 Ga.	9.80	12 3/4"	12 Ga.	14.50
	10 Ga.	12.50		10 Ga.	18.60
	3/16"	16.90		3/16"	25.20
	1/4"	22.40		1/4"	33.40
10"	*12 Ga.	12.20	14"	12 Ga.	15.90
	*11 Ga.	12.80		10 Ga.	20.40
	*10 Ga.	14.50		3/16"	27.70
	3/16"	19.70		1/4"	36.70
	1/4"	26.00			
10 3/4"			16"	12 Ga.	18.20
	12 Ga.	12.20		10 Ga.	23.40
	10 Ga.	15.60		3/16"	31.70
	3/16"	21.20		1/4"	42.10
	1/4"	28.00			

* Also available in galvanized finish.

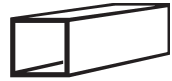
SQUARE TUBE

Size and Gauge	Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
1/2 x 1/2	16 Ga. .384	7.68	9.22	15.36
3/4 x 3/4	16 Ga. .606	12.12	14.54	24.24
	15 Ga. .664	13.28	15.94	26.56
	14 Ga. .753	15.06	18.07	30.12
	11 Ga. 1.028	20.56	24.67	41.12
1 x 1	16 Ga. .827	16.54	19.85	33.08
	15 Ga. .909	18.18	21.82	36.36
	14 Ga. 1.035	20.70	24.84	41.40
	12 Ga. 1.320	26.40	31.68	52.80
	11 Ga. 1.436	28.72	34.46	57.44
1 1/4 x 1 1/4	16 Ga. 1.047	20.94	25.13	41.88
	14 Ga. 1.317	26.34	31.61	52.68
	12 Ga. 1.691	33.82	40.58	67.64

SQUARE TUBE

Size and Gauge		Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
1 1/4 x 1 1/4 (continued)	11 Ga.	1.844	36.88	44.26	73.76
	3/16"	2.913	58.26	69.91	116.52
1 1/2 x 1 1/2	16 Ga.	1.268	25.36	30.43	50.72
	14 Ga.	1.599	31.98	38.38	63.96
	12 Ga.	2.062	41.24	49.49	82.48
	11 Ga.	2.252	45.04	54.05	90.08
	3/16"	3.046	60.92	73.10	121.84
1 3/4 x 1 3/4	16 Ga.	1.490	29.80	35.76	59.60
	14 Ga.	1.882	37.64	45.17	75.28
	12 Ga.	2.433	48.66	58.39	97.32
	11 Ga.	2.660	53.20	63.84	106.40
2 x 2	16 Ga.	1.710	34.20	41.04	68.40
	14 Ga.	2.164	43.28	51.94	86.56
	12 Ga.	2.802	56.04	67.25	112.08
	11 Ga.	3.050	61.00	73.20	122.00
	3/16"	4.320	86.40	103.68	172.80
	1/4"	5.410	108.20	129.84	216.40
2 1/2 x 2 1/2	14 Ga.	2.730	54.60	65.52	109.20
	12 Ga.	3.544	70.88	85.06	141.76
	11 Ga.	3.900	78.00	93.60	156.00
	3/16"	5.590	111.80	134.16	223.60
	1/4"	7.110	142.20	170.64	284.40
3 x 3	14 Ga.	3.230	64.60	77.52	129.20
	12 Ga.	4.180	83.60	100.32	167.20
	11 Ga.	4.750	95.00	114.00	190.00
	3/16"	6.870	137.40	164.88	274.80
	1/4"	8.810	176.20	211.44	352.40
	5/16"	10.580	211.60	253.92	423.20
3 1/2 x 3 1/2	14 Ga.	3.800	76.00	91.20	152.00
	12 Ga.	4.920	98.40	118.08	196.80
	11 Ga.	5.610	112.20	134.64	224.40
	3/16"	8.150	163.00	195.60	326.00
	1/4"	10.510	210.20	252.24	420.40
4 x 4	14 Ga.	4.360	87.20	104.64	174.40
	12 Ga.	5.660	113.20	135.84	226.40
	11 Ga.	6.460	129.20	155.04	258.40
	3/16"	9.420	188.40	226.08	376.80

(continued on next page)

SQUARE TUBE

Size and Gauge		Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
4 x 4 (continued)	1/4"	12.210	244.20	293.04	488.40
	5/16"	14.830	296.60	355.92	593.20
	3/8"	17.270	345.40	414.48	690.80
	1/2"	21.610	432.20	518.64	864.40
4 1/2 x 4 1/2	11 Ga.	7.33	146.60	175.92	293.20
	3/16"	10.70	214.00	256.80	428.00
	1/4"	13.90	278.00	333.60	556.00
5 x 5	3/16"	11.970	239.40	287.28	478.80
	1/4"	15.620	312.40	374.88	624.80
	5/16"	19.080	381.60	457.92	763.20
	3/8"	22.370	447.40	536.88	894.80
6 x 6	3/16"	14.530	290.60	348.72	581.20
	1/4"	19.020	380.40	456.48	760.80
	5/16"	23.340	466.80	560.16	933.60
	3/8"	27.480	549.60	659.52	1099.20
7 x 7	1/4"	22.420	448.40	538.08	896.80
	5/16"	27.590	551.80	662.16	1103.60
	3/8"	32.580	651.60	781.92	1303.20
	1/2"	42.050	841.00	1009.20	1682.00
8 x 8	1/4"	25.820	516.40	619.68	1032.80
	5/16"	31.840	636.80	764.16	1273.60
	3/8"	37.690	753.80	904.56	1507.60
	1/2"	48.850	977.00	1172.40	1954.00
10 x 10	3/16"	24.73	494.60	593.52	989.20
	1/4"	32.63	652.60	783.12	1305.20
	3/8"	47.90	958.00	1149.60	1916.00
	1/2"	62.46	1249.20	1499.04	2498.40
12 x 12	1/4"	39.43	788.60	946.32	1577.20
	3/8"	58.10	1162.00	1394.40	2324.00
	1/2"	76.06	1521.20	1825.44	3042.40

RECTANGULAR TUBE

ASTM Grades



Under 2": ASTM A-513 — 2" & Over: ASTM A-500 Gr. B

Size and Gauge		Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
1 1/2 x 3/4	14 Ga.	1.176	23.52	28.22	47.04
1 1/2 x 1	14 Ga.	1.317	26.34	31.61	52.68
2 x 1	16 Ga.	1.268	25.36	30.43	50.72
	14 Ga.	1.599	31.98	38.38	63.96
	11 Ga.	2.252	45.04	54.05	90.08
2 x 1 1/2	14 Ga.	1.882	37.64	45.17	75.28
	11 Ga.	2.660	53.20	63.84	106.40
2 1/2 x 1 1/2	14 Ga.	2.160	43.20	51.84	86.40
	11 Ga.	3.070	61.40	73.68	122.80
	3/16"	4.320	86.40	103.68	172.80
3 x 1	14 Ga.	2.160	43.20	51.84	86.40
	11 Ga.	3.070	61.40	73.68	122.80
3 x 1 1/2	14 Ga.	2.390	47.80	57.36	95.60
	11 Ga.	3.480	69.60	83.52	139.20
	3/16"	4.970	101.40	121.68	202.80
3 x 2	14 Ga.	2.730	54.60	65.52	109.20
	11 Ga.	3.900	78.00	93.60	156.00
	3/16"	5.590	111.80	134.16	223.60
	1/4"	7.110	142.20	170.64	284.40
4 x 1 1/2	14 Ga.	2.981	59.62	71.54	119.24
	11 Ga.	4.292	85.84	103.01	171.68
4 x 2	14 Ga.	3.290	65.80	78.96	131.60
	11 Ga.	4.750	95.00	114.00	190.00
	3/16"	6.870	137.40	164.88	274.80
	1/4"	8.810	176.20	211.44	352.40
4 x 3	11 Ga.	5.610	112.20	134.64	224.40
	3/16"	8.150	163.00	195.60	326.00
	1/4"	10.510	210.20	252.24	420.40
5 x 2	11 Ga.	5.610	112.20	134.64	224.00
	3/16"	8.150	163.00	195.60	326.00
	1/4"	10.510	210.20	252.24	420.40

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RECTANGULAR TUBE**ASTM Grades****Under 2": ASTM A-513 — 2" & Over: ASTM A-500 Gr. B**

Size and Gauge		Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
5 x 3	11 Ga.	6.460	129.20	155.04	258.40
	3/16"	9.420	188.40	226.08	376.80
	1/4"	12.210	244.20	293.04	488.40
	5/16"	14.830	296.60	355.92	593.20
	3/8"	17.270	345.40	414.48	690.80
5 x 4	11 Ga.	7.330	146.00	175.92	293.20
	3/16"	10.700	214.00	256.80	428.00
	1/4"	13.900	278.00	333.60	556.00
6 x 2	11 Ga.	6.460	129.20	155.04	258.40
	3/16"	9.420	188.40	226.08	376.80
	1/4"	12.210	244.20	293.04	488.40
6 x 3	3/16"	10.700	214.00	256.80	428.00
	1/4"	13.910	278.20	333.84	556.40
	5/16"	16.960	339.20	407.04	678.40
	3/8"	19.820	396.40	475.68	792.80
6 x 4	3/16"	11.970	239.40	287.28	478.80
	1/4"	15.620	312.40	374.88	624.80
	5/16"	19.080	381.60	457.92	763.20
	3/8"	22.370	447.40	536.80	894.80
	1/2"	28.430	568.60	682.32	1137.20
7 x 3	3/16"	11.970	239.40	287.28	478.80
	1/4"	15.620	312.40	374.88	624.80
	5/16"	19.080	381.60	457.92	763.20
	3/8"	22.370	447.40	536.80	894.80
7 x 5	3/16"	14.550	291.00	349.20	582.00
	1/4"	19.020	380.40	456.48	760.80
	5/16"	23.350	467.00	560.40	934.00
	3/8"	27.480	549.60	659.52	1099.20
8 x 2	3/16"	11.970	239.40	287.28	478.80
	1/4"	15.620	312.40	374.88	624.80
8 x 3	3/16"	13.250	265.00	318.00	530.00
	1/4"	17.320	346.40	415.68	692.80
	5/16"	21.210	424.20	509.04	848.40
	3/8"	24.930	498.60	598.32	997.20



RECTANGULAR TUBE

ASTM Grades

Under 2": ASTM A-513 — 2" & Over: ASTM A-500 Gr. B

Size and Gauge		Wt. Lbs./Ft	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
8 x 4	3/16"	14.530	290.60	348.72	581.20
	1/4"	19.020	380.40	456.48	760.80
	5/16"	23.340	466.80	560.16	933.60
	3/8"	27.480	549.60	659.52	1099.20
8 x 6	1/4"	22.420	448.40	538.08	896.80
	5/16"	27.590	551.80	662.16	1103.60
	3/8"	32.580	651.60	781.92	1303.20
10 x 4	1/4"	22.420	448.40	538.08	896.80
	5/16"	27.590	551.80	662.16	1103.60
	3/8"	32.580	651.60	781.92	1303.20
10 x 6	1/4"	25.820	516.40	619.68	1032.80
	5/16"	31.840	636.80	764.16	1273.60
	3/8"	37.690	753.80	904.56	1507.60
10 x 8	1/4"	29.200	584.00	700.80	1168.00
	5/16"	36.125	722.50	867.00	1445.00
	3/8"	42.790	855.80	1026.96	1711.60
12 x 4	1/4"	25.820	516.40	619.68	1032.80
	5/16"	31.840	636.80	764.16	1273.60
	3/8"	37.690	753.80	904.56	1507.60
12 x 6	1/4"	29.200	584.00	700.80	1168.00
	5/16"	36.120	722.40	866.88	1444.80
	3/8"	42.750	855.00	1026.00	1710.00
12 x 8	1/4"	32.590	651.80	782.16	1303.60
	5/16"	40.370	807.40	968.88	1614.80
	3/8"	47.850	957.00	1148.40	1914.00

HOT ROLLED SQUARES

A-36

Size	Lbs./Ft.	Lbs./20'	Size	Lbs./Ft.	Lbs./20'
3/8	.478	9.56	5/8	1.329	26.58
1/2	.851	17.02	3/4	1.914	38.28
1/2 (twisted)	.851	17.02	7/8	2.605	52.10

HOT ROLLED SQUARES**A-36**

Size	Lbs./Ft.	Lbs./20'	Size	Lbs./Ft.	Lbs./20'
1	3.402	68.04	1 5/8	8.980	179.59
1 1/4	5.316	106.23	2	13.600	272.00
1 1/2	7.655	153.10			

**COLD DRAWN SQUARES
C1018****HOT ROLLED ROUNDS
MBQ - A-36**

Size	Lbs./Ft.	Lbs./12'	Size	Lbs./Ft.	Lbs./20'
1/4	.213	2.56	1/4	.167	3.34
5/16	.332	3.98	5/16	.261	5.22
3/8	.478	5.74	3/8	.376	7.52
1/2	.850	10.20	7/16	.511	10.22
5/8	1.330	15.96	1/2	.668	13.36
3/4	1.910	22.92	9/16	.845	16.90
7/8	2.600	31.20	5/8	1.043	20.86
1	3.400	40.80	3/4	1.502	30.04
1 1/8	4.300	51.60	7/8	2.045	40.88
1 1/4	5.310	63.72	1	2.670	53.40
			1 1/8	3.380	67.60
			1 1/4	4.172	83.44
			1 3/8	5.049	100.98
			1 1/2	6.008	120.16
			1 3/4	8.180	163.60
			2	10.680	213.60
			2 1/2	16.690	333.80

INQUIRE REGARDING:

Sizes not listed - Grades not listed.
Grade 50 Rounds

COLD DRAWN ROUNDS**C1018, C1045, C1144SR and Stress Relieved****Stock Lengths - 12' & 20'**

Size	Lbs./Ft.	Lbs./20'	Size	Lbs./Ft.	Lbs./20'
1/8	.042	.84	7/16	.511	10.22
3/16	.094	1.88	1/2	.668	13.36
7/32	.128	2.56	9/16	.845	16.90
1/4	.167	3.34	5/8	1.040	20.80
5/16	.261	5.22	11/16	1.260	25.20
3/8	.376	7.52	3/4	1.500	30.00

COLD DRAWN ROUNDS
C1018, C1045, C1144SR and Stress Relieved
Stock Lengths – 12' & 20'

Size	Lbs./Ft.	Lbs./20'	Size	Lbs./Ft.	Lbs./20'
13/16	1.760	35.20	2 7/16	15.870	317.40
7/8	2.040	40.80	2 1/2	16.690	333.80
15/16	2.350	47.00	2 5/8	18.400	368.00
1	2.670	53.40	2 11/16	19.290	385.80
1 1/16	3.020	60.40	2 3/4	20.190	403.80
1 1/8	3.380	67.60	2 7/8	22.070	441.40
1 3/16	3.770	75.40	2 15/16	23.040	460.80
1 1/4	4.170	83.40	3	24.030	480.60
1 5/16	4.600	92.00	3 3/16	27.130	542.60
1 3/8	5.050	101.00	3 7/16	31.550	631.00
1 7/16	5.520	110.40	3 1/2	32.710	654.20
1 1/2	6.010	120.20	3 11/16	36.310	726.20
1 9/16	6.520	130.40	3 15/16	41.400	828.00
1 5/8	7.050	141.00	4	42.730	854.60
1 11/16	7.600	152.00	4 3/16	46.830	936.60
1 3/4	8.180	163.60	4 1/4	48.230	964.60
1 13/16	8.770	175.40	4 5/16	49.660	993.20
1 7/8	9.390	187.80	4 7/16	52.580	1051.60
1 15/16	10.020	200.40	4 1/2	54.080	1081.60
2	10.680	213.60	4 15/16	65.100	1302.00
2 1/16	11.360	227.20	5	66.760	1335.20
2 1/8	12.060	241.20	5 1/2	80.780	1615.60
2 3/16	12.780	255.60	6	96.130	1922.60
2 1/4	13.520	270.40	6 1/2	112.820	2256.40
2 3/8	15.060	301.20			

COLD DRAWN FLATS
C1018 x 12' Lengths

Size	Lbs./Ft.	Lbs./12'
3/8 x 2	2.55	30.60
1/2 x 1	1.70	20.40
1/2 x 2	3.40	40.80
1/2 x 2 1/2	4.25	51.00

INQUIRE REGARDING: Sizes not listed - Grades not listed.

HOT ROLLED STRIP

A-1011 and A-36

Size	Lbs./Ft.	Lbs./20'
1/8 x 1/2	.213	4.26
1/8 x 3/4	.319	6.38
1/8 x 1	.425	8.50
1/8 x 1 1/4	.531	10.62
1/8 x 1 1/2	.638	12.76
1/8 x 1 3/4	.744	14.88
1/8 x 2	.850	17.00
1/8 x 2 1/2	1.060	21.20
1/8 x 2 3/4	1.170	23.40
1/8 x 3	1.280	25.60
1/8 x 3 1/2	1.490	29.80
1/8 x 4	1.700	34.00
1/8 x 4 1/2	1.910	38.20
1/8 x 5	2.130	42.60
1/8 x 6	2.550	51.00
1/8 x 7	2.980	59.60
1/8 x 8	3.400	68.00
1/8 x 10	4.250	85.00
1/8 x 12	5.100	102.00
3/16 x 1/2	.319	6.38
3/16 x 3/4	.478	9.56
3/16 x 1	.638	12.76
3/16 x 1 1/4	.797	15.94
3/16 x 1 1/2	.956	19.12
3/16 x 1 3/4	1.120	22.40
3/16 x 2	1.280	25.60
3/16 x 2 1/2	1.590	31.80
3/16 x 2 3/4	1.750	35.00
3/16 x 3	1.910	38.20
3/16 x 3 1/2	2.230	44.60
3/16 x 4	2.550	51.00
3/16 x 5	3.190	63.80
3/16 x 6	3.830	76.60
3/16 x 7	4.460	89.20
3/16 x 8	5.100	102.00
3/16 x 9	5.740	114.80
3/16 x 10	6.380	127.60
3/16 x 12	7.650	153.00

SEE: Universal Mill Plates for widths over 12"

HOT ROLLED FLATS

A-36

Size	Lbs./Ft.	Lbs./20'
1/4 x 1/2	.425	8.50
1/4 x 3/4	.638	12.76
1/4 x 1	.850	17.00
1/4 x 1 1/4	1.060	21.20
1/4 x 1 1/2	1.280	25.60
1/4 x 1 3/4	1.490	29.80
1/4 x 2	1.700	34.00
1/4 x 2 1/4	1.910	38.20
1/4 x 2 1/2	2.130	42.60
1/4 x 2 3/4	2.340	46.80
1/4 x 3	2.550	51.00
1/4 x 3 1/4	2.760	55.20
1/4 x 3 1/2	2.980	59.60
1/4 x 4	3.400	68.00
1/4 x 4 1/2	3.830	76.60
1/4 x 5	4.250	85.00
1/4 x 5 1/2	4.680	93.60
1/4 x 6	5.100	102.00
1/4 x 6 1/2	5.530	110.60
1/4 x 7	5.950	119.00
1/4 x 8	6.800	136.00
5/16 x 1	1.060	21.20
5/16 x 1 1/4	1.330	26.60
5/16 x 1 1/2	1.590	31.80
5/16 x 1 3/4	1.860	37.20
5/16 x 2	2.130	42.60
5/16 x 2 1/2	2.660	53.20
5/16 x 3	3.190	63.80
5/16 x 3 1/2	3.720	74.40
5/16 x 4	4.250	85.00
5/16 x 4 1/2	4.780	95.60
5/16 x 5	5.310	106.20
5/16 x 6	6.380	127.60
5/16 x 8	8.500	170.00
3/8 x 3/4	.956	19.20
3/8 x 1	1.280	25.60
3/8 x 1 1/4	1.590	31.80
3/8 x 1 1/2	1.910	38.20
3/8 x 1 3/4	2.230	44.60
3/8 x 2	2.550	51.00

HOT ROLLED FLATS

A-36

Size	Lbs./Ft.	Lbs./20'
3/8 x 2 1/4	2.870	57.40
3/8 x 2 1/2	3.190	63.80
3/8 x 2 3/4	3.510	70.20
3/8 x 3	3.830	76.60
3/8 x 3 1/2	4.460	89.20
3/8 x 4	5.100	102.00
3/8 x 4 1/2	5.740	114.20
3/8 x 5	6.380	127.60
3/8 x 5 1/2	7.010	140.20
3/8 x 6	7.650	153.00
3/8 x 6 1/2	8.290	165.80
3/8 x 7	8.930	178.60
3/8 x 8	10.200	204.00
1/2 x 3/4	1.280	25.60
1/2 x 1	1.700	34.00
1/2 x 1 1/4	2.130	42.60
1/2 x 1 1/2	2.550	51.00
1/2 x 1 3/4	2.980	59.60
1/2 x 2	3.400	68.00
1/2 x 2 1/4	3.830	76.60
1/2 x 2 1/2	4.250	85.00
1/2 x 3	5.100	102.00
1/2 x 3 1/2	5.950	119.00
1/2 x 4	6.800	136.00
1/2 x 4 1/2	7.650	153.00
1/2 x 5	8.500	170.00
1/2 x 5 1/2	9.350	187.00
1/2 x 6	10.200	204.00
1/2 x 7	11.900	238.00
1/2 x 8	13.600	272.00
5/8 x 1 1/2	3.190	63.80
5/8 x 2	4.250	85.00
5/8 x 2 1/2	5.310	106.20
5/8 x 3	6.380	127.60
5/8 x 3 1/2	7.440	148.80
5/8 x 4	8.500	170.00
5/8 x 4 1/2	9.560	191.20
5/8 x 5	10.630	212.60
5/8 x 6	12.750	255.00

HOT ROLLED FLATS**A-36**

Size	Lbs./Ft.	Lbs./20'
5/8 x 7	14.880	297.60
5/8 x 8	17.000	340.00
3/4 x 1	2.550	51.00
3/4 x 1 1/4	3.190	63.80
3/4 x 1 1/2	3.830	76.60
3/4 x 2	5.100	102.00
3/4 x 2 1/2	6.380	127.60
3/4 x 3	7.650	153.00
3/4 x 3 1/2	8.930	178.60
3/4 x 4	10.200	204.00
3/4 x 4 1/2	11.480	229.60
3/4 x 5	12.750	255.00
3/4 x 5 1/2	14.030	280.60
3/4 x 6	15.300	306.00
3/4 x 7	17.850	357.00
3/4 x 8	20.400	408.00
1 x 1 1/2	5.100	102.00
1 x 2	6.800	136.00
1 x 2 1/2	8.500	170.00
1 x 3	10.200	204.00
1 x 3 1/2	11.900	238.00
1 x 4	13.600	272.00
1 x 4 1/2	15.300	306.00
1 x 5	17.000	340.00
1 x 6	20.400	408.00
1 x 7	23.800	476.00
1 x 8	27.200	544.00
1 1/4 x 3	12.750	255.00
1 1/4 x 4	17.000	340.00
1 1/4 x 5	21.250	425.00
1 1/4 x 6	25.500	510.00
1 1/2 x 3	15.300	306.00
1 1/2 x 4	20.400	408.00
1 1/2 x 6	30.600	612.00
2 x 4	27.200	544.00

SEE: Universal Mill Plates for widths over 8".
 INQUIRE REGARDING: Special sizes, special lengths, special grades & stainless.

UNIVERSAL MILL PLATES

A-36

Size	Lbs./Ft.	Lbs./20'
1/4 x 9	7.66	153.20
1/4 x 10	8.51	170.20
1/4 x 11	9.36	187.20
1/4 x 12	10.21	204.20
5/16 x 10	10.63	212.60
3/8 x 9	11.49	229.80
3/8 x 10	12.77	255.40
3/8 x 11	14.04	280.80
3/8 x 12	15.32	306.40
1/2 x 9	15.32	306.40
1/2 x 10	17.02	340.40
1/2 x 11	18.79	375.80
1/2 x 12	20.42	408.40
5/8 x 9	19.15	383.00
5/8 x 10	21.27	425.40
5/8 x 12	25.53	510.60
3/4 x 9	22.97	459.40
3/4 x 10	25.52	510.40
3/4 x 12	30.63	612.60
1 x 9	30.63	612.60
1 x 10	34.00	680.00
1 x 12	40.84	816.60

STOCKED IN: 20' lengths. SEE: Hot Rolled Flats for widths under 8 1/2".

ANGLES – BAR SIZE

A-36



Size			Lbs./Ft.	Lbs./20'
A	B	C		
1/2	x 1/2	1/8	.38	7.60
3/4	x 3/4	1/8	.59	11.80
1	x 1	1/8	.80	16.00
1	x 1	3/16	1.16	23.20
1	x 1	1/4	1.49	29.80
1 1/4	x 1 1/4	1/8	1.01	20.20
1 1/4	x 1 1/4	3/16	1.48	29.60
1 1/4	x 1 1/4	1/4	1.92	38.40
1 1/2	x 1 1/2	1/8	1.23	24.60
1 1/2	x 1 1/2	3/16	1.80	36.00
1 1/2	x 1 1/2	1/4	2.34	46.80
1 3/4	x 1 3/4	1/8	1.44	28.80
1 3/4	x 1 3/4	3/16	2.12	42.40
1 3/4	x 1 3/4	1/4	2.77	55.40
2	x 1 1/4	3/16	1.96	39.20
2	x 1 1/4	1/4	2.55	51.00
2	x 1 1/2	1/8	1.44	28.80
2	x 1 1/2	3/16	2.12	42.40
2	x 1 1/2	1/4	2.77	55.40
2	x 2	1/8	1.65	33.00
2	x 2	3/16	2.44	48.80
2	x 2	1/4	3.19	63.80
2	x 2	5/16	3.92	78.40
2	x 2	3/8	4.70	94.00
2 1/2	x 1 1/2	3/16	2.44	48.80
2 1/2	x 1 1/2	1/4	3.19	63.80
2 1/2	x 2	3/16	2.75	55.00
2 1/2	x 2	1/4	3.62	72.40
2 1/2	x 2	5/16	4.50	90.00
2 1/2	x 2	3/8	5.30	106.00
2 1/2	x 2 1/2	3/16	3.07	61.40
2 1/2	x 2 1/2	1/4	4.10	82.00
2 1/2	x 2 1/2	5/16	5.00	100.00
2 1/2	x 2 1/2	3/8	5.90	118.00
2 1/2	x 2 1/2	1/2	7.70	154.00

AVAILABLE IN: 20' and 40' Lengths.

ANGLES - STRUCTURAL

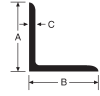
A-36



Size					Lbs./Ft.	Lbs./20'
A	B	C				
3	x 2	x	3/16		3.07	61.40
3	x 2	x	1/4		4.10	82.00
3	x 2	x	5/16		5.00	100.00
3	x 2	x	3/8		5.90	118.00
3	x 2 1/2	x	3/16		3.39	67.80
3	x 2 1/2	x	1/4		4.50	90.00
3	x 2 1/2	x	5/16		5.60	112.00
3	x 2 1/2	x	3/8		6.60	132.00
3	x 3	x	3/16		3.71	74.20
3	x 3	x	1/4		4.90	98.00
3	x 3	x	5/16		6.10	122.00
3	x 3	x	3/8		7.20	144.00
3	x 3	x	1/2		9.40	188.00
3 1/2	x 2 1/2	x	1/4		4.90	98.00
3 1/2	x 2 1/2	x	5/16		6.10	122.00
3 1/2	x 2 1/2	x	3/8		7.20	144.00
3 1/2	x 2 1/2	x	1/2		9.40	188.00
3 1/2	x 3	x	1/4		5.40	108.00
3 1/2	x 3	x	5/16		6.60	132.00
3 1/2	x 3	x	3/8		7.90	158.00
3 1/2	x 3	x	1/2		10.20	204.00
3 1/2	x 3 1/2	x	1/4		5.80	116.00
3 1/2	x 3 1/2	x	5/16		7.20	144.00
3 1/2	x 3 1/2	x	3/8		8.50	170.00
3 1/2	x 3 1/2	x	1/2		11.10	222.00
4	x 3	x	1/4		5.80	124.00
4	x 3	x	5/16		7.20	144.00
4	x 3	x	3/8		8.50	170.00
4	x 3	x	1/2		11.10	222.00
4	x 3 1/2	x	1/4		6.20	124.00
4	x 3 1/2	x	5/16		7.70	154.00
4	x 3 1/2	x	3/8		9.10	182.00
4	x 3 1/2	x	1/2		11.90	238.00
4	x 4	x	1/4		6.60	132.00
4	x 4	x	5/16		8.20	164.00
4	x 4	x	3/8		9.80	196.00
4	x 4	x	1/2		12.80	256.00
4	x 4	x	3/4		18.50	370.00

ANGLES – STRUCTURAL

A-36



Size				Lbs./Ft.	Lbs./20'
A	B	C			
5	x 3	x	1/4	6.60	132.00
5	x 3	x	5/16	8.20	164.00
5	x 3	x	3/8	9.80	196.00
5	x 3	x	1/2	12.80	256.00
5	x 3 1/2	x	1/4	7.00	140.00
5	x 3 1/2	x	5/16	8.70	174.00
5	x 3 1/2	x	3/8	10.40	208.00
5	x 3 1/2	x	1/2	13.60	272.00
5	x 5	x	5/16	10.30	206.00
5	x 5	x	3/8	12.30	246.00
5	x 5	x	1/2	16.20	324.00
6	x 3 1/2	x	1/4	7.90	158.00
6	x 3 1/2	x	5/16	9.80	196.00
6	x 3 1/2	x	3/8	11.70	234.00
6	x 4	x	1/4	8.30	166.00
6	x 4	x	5/16	10.30	206.00
6	x 4	x	3/8	12.30	246.00
6	x 4	x	1/2	16.20	324.00
6	x 4	x	5/8	20.00	400.00
6	x 6	x	5/16	12.40	248.00
6	x 6	x	3/8	14.90	298.00
6	x 6	x	1/2	19.60	392.00
6	x 6	x	3/4	28.70	574.00
7	x 4	x	3/8	13.60	272.00
7	x 4	x	1/2	17.90	358.00
8	x 4	x	1/2	19.60	392.00
8	x 6	x	1/2	23.00	460.00
8	x 8	x	1/2	26.40	528.00
8	x 8	x	3/4	38.90	778.00
8	x 8	x	1	51.00	1020.00

AVAILABLE IN: 20' and 40' Lengths.

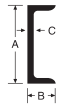
STRUCTURAL CHANNEL

A-36



Size	Lbs./Ft.	Flange Width	Web Thickness	Lbs./20'	Lbs./40'
A		B	C		
3 (Light Wt.)	3.50	1.375	.145	70	140
3	4.10	1.410	.170	82	164
3	5.00	1.498	.258	100	200
3	6.00	1.596	.356	120	240
4 (Light Wt.)	4.50	1.584	.158	90	180
4	5.40	1.580	.180	108	216
4	7.25	1.720	.320	145	290
5	6.70	1.750	.190	134	268
5	9.00	1.885	.325	180	360
6	8.20	1.920	.200	164	328
6	10.50	2.034	.314	210	420
6	13.00	2.157	.437	260	520
7	9.80	2.090	.210	196	392
8	8.50	1.875	.180	170	340
8	11.50	2.260	.220	230	460
8	13.75	2.343	.303	275	550
8	18.75	2.527	.487	375	750
9	13.40	2.430	.230	268	536
10	15.30	2.600	.240	306	612
10	20.00	2.739	.379	400	800
10	25.00	2.886	.526	500	1000
12	20.70	2.940	.280	414	828
12	25.00	3.047	.387	500	1000
12	30.00	3.170	.510	600	1200
15	33.90	3.400	.400	678	1356

CHANNEL – BAR SIZE A-36



Size				Lbs./Ft.	Lbs./20'
A	B	C			
1	x	1/2	x 1/8	.84	16.80
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
2	x	1/2	x 1/8	1.43	28.60
2	x	9/16	x 3/16	1.86	37.20
2	x	1	x 1/8	1.59	31.80
2	x	1	x 3/16	2.32	46.40

CHANNELS – SHIP and CAR A-36



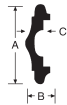
Size	Lbs./Ft.	Flange Width	Web Thickness	Lbs./20'
A		B	C	
4	13.80	2.500	.500	276
6	12	2.497	.310	240
8	18.7	2.987	.353	374

JUNIOR CHANNELS Stair Stringer Channels — A-36



Size	Lbs./Ft.	Flange Width	Web Thickness	Lbs./20'
A		B	C	
10	6.50	1.125	.150	130
10	8.40	1.500	.170	168
12	10.60	1.500	.190	212

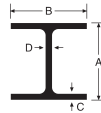
#1606L HANDRAIL CAP CHANNEL A-36



Size	Lbs./Ft.	Flange Width	Web Thickness	Lbs./20'
A		B	C	
1 1/16 (I.D.)	1.27	.180	.200	25.40

WIDE FLANGE BEAMS

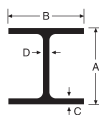
A992



Nominal Size in Inches	Lbs. /Ft.	Depth of Section in Inches	Flange Width in Inches	Flange Thickness in Inches	Web Thickness in Inches
		A	B	C	D
4 x 4	13.0	4.16	4.060	.345	.280
5 x 5	16.0	5.00	5.000	.360	.240
6 x 4	9.0	5.90	3.940	.215	.170
6 x 4	12.0	6.00	4.030	.279	.230
6 x 4	16.0	6.28	4.030	.405	.260
6 x 6	15.0	5.99	5.990	.260	.230
6 x 6	20.0	6.20	6.018	.367	.258
6 x 6	25.0	6.37	6.080	.456	.320
8 x 4	10.0	7.90	3.940	.204	.170
8 x 4	13.0	8.00	4.000	.254	.230
8 x 4	15.0	8.12	4.015	.314	.245
8 x 5 1/4	18.0	8.14	5.250	.330	.230
8 x 5 1/4	21.0	8.28	5.270	.400	.250
8 x 6 1/2	24.0	7.93	6.500	.398	.245
8 x 6 1/2	28.0	8.06	6.540	.463	.285
8 x 8	31.0	8.00	8.000	.433	.288
8 x 8	35.0	8.12	8.027	.493	.315
8" H Piling	36.0	8.02	8.155	.445	.445
8 x 8	40.0	8.25	8.077	.558	.365
8 x 8	48.0	8.50	8.117	.683	.405
10 x 4	12.0	9.87	3.960	.210	.190
10 x 4	15.0	10.00	4.000	.269	.230
10 x 4	17.0	10.12	4.010	.329	.240
10 x 4	19.0	10.25	4.020	.394	.250
10 x 5 3/4	22.0	10.17	5.750	.360	.240
10 x 5 3/4	26.0	10.33	5.770	.440	.260
10 x 5 3/4	30.0	10.47	5.810	.510	.300
10 x 8	33.0	9.75	7.964	.433	.292
10 x 8	39.0	9.94	7.990	.528	.318
10 x 8	45.0	10.12	8.022	.618	.350
10" H Piling	42.0	9.70	10.075	.420	.415
10 x 10	49.0	10.00	10.000	.558	.340
12 x 4	14.0	11.91	3.970	.224	.200
12 x 4	16.0	11.99	3.990	.265	.220
12 x 4	19.0	12.16	4.010	.349	.240
12 x 4	22.0	12.31	4.030	.424	.260

WIDE FLANGE BEAMS

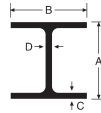
A992



Nominal Size in Inches	Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./30'	Wt. Lbs./40'	Wt. Lbs./50'	Wt. Lbs./60'
4 x 4	13.0	260	390	520	650	780
5 x 5	16.0	320	480	640	800	960
6 x 4	9.0	180	270	360	450	540
6 x 4	12.0	240	360	480	600	720
6 x 4	16.0	320	480	640	800	960
6 x 6	15.0	300	450	600	750	900
6 x 6	20.0	400	600	800	1000	1200
6 x 6	25.0	500	750	1000	1250	1500
8 x 4	10.0	200	300	400	500	600
8 x 4	13.0	260	390	520	650	780
8 x 4	15.0	300	450	600	750	900
8 x 5 1/4	18.0	360	540	720	900	1080
8 x 5 1/4	21.0	420	630	840	1050	1260
8 x 6 1/2	24.0	480	720	960	1200	1440
8 x 6 1/2	28.0	560	840	1120	1400	1680
8 x 8	31.0	620	930	1240	1550	1860
8 x 8	35.0	700	1050	1400	1750	2100
8" H Piling	36.0	720	1080	1440	1800	2160
8 x 8	40.0	800	1200	1600	2000	2400
8 x 8	48.0	960	1440	1920	2400	2880
10 x 4	12.0	240	360	480	600	720
10 x 4	15.0	300	450	600	750	900
10 x 4	17.0	340	510	680	850	1020
10 x 4	19.0	380	570	760	950	1140
10 x 5 3/4	22.0	440	660	880	1100	1320
10 x 5 3/4	26.0	520	780	1040	1300	1560
10 x 5 3/4	30.0	600	900	1200	1500	1800
10 x 8	33.0	660	990	1320	1650	1980
10 x 8	39.0	780	1170	1560	1950	2340
10 x 8	45.0	900	1350	1800	2250	2700
10" H Piling	42.0	840	1260	1680	2100	2520
10 x 10	49.0	980	1470	1960	2450	2940
12 x 4	14.0	280	420	560	700	840
12 x 4	16.0	320	480	640	800	960
12 x 4	19.0	380	570	760	950	1140
12 x 4	22.0	440	660	880	1100	1320

WIDE FLANGE BEAMS

A992

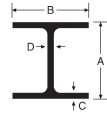


Nominal Size in Inches	Lbs. /Ft.	Depth of Section in Inches	Flange Width in Inches	Flange Thickness in Inches	Web Thickness in Inches
		A	B	C	D
12 x 6 1/2	26.0	12.22	6.490	.380	.230
12 x 6 1/2	30.0	12.34	6.520	.440	.260
12 x 6 1/2	35.0	12.50	6.560	.520	.300
12 x 8	40.0	11.94	8.000	.516	.294
12 x 8	45.0	12.06	8.042	.576	.336
12 x 8	50.0	12.19	8.077	.640	.371
14 x 5	22.0	13.72	5.000	.335	.230
14 x 5	26.0	13.89	5.025	.418	.255
14 x 6 3/4	30.0	13.86	6.733	.383	.270
14 x 6 3/4	34.0	14.00	6.750	.453	.287
14 x 8	43.0	13.68	8.000	.528	.308
14 x 10	61.0	13.89	9.995	.645	.375
16 x 5 1/2	26.0	15.65	5.500	.345	.250
16 x 5 1/2	31.0	15.84	5.525	.442	.275
16 x 7	36.0	15.85	6.992	.428	.299
16 x 7	40.0	16.00	7.000	.503	.307
16 x 7	50.0	16.25	7.073	.628	.380
16 x 7	57.0	16.43	7.120	.715	.430
18 x 6	35.0	17.71	6.000	.429	.298
18 x 6	40.0	17.90	6.018	.524	.316
18 x 6	46.0	18.06	6.060	.605	.360
18 x 7 1/2	50.0	18.00	7.500	.570	.358
18 x 7 1/2	55.0	18.12	7.532	.630	.390
21 x 6 1/2	44.0	20.66	6.500	.451	.348
21 x 6 1/2	50.0	20.83	6.530	.535	.380
21 x 8 1/4	68.0	21.13	8.270	.685	.430
24 x 7	55.0	23.63	7.000	.500	.375
24 x 7	76.0	23.92	8.990	.680	.440
24 x 9	76.0	23.92	8.990	.680	.440

INQUIRE REGARDING: Special lengths.

WIDE FLANGE BEAMS

A992

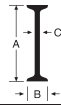


Nominal Size in Inches	Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./30'	Wt. Lbs./40'	Wt. Lbs./50'	Wt. Lbs./60'
12 x 6 1/2	26.0	520	780	1040	1300	1560
12 x 6 1/2	30.0	600	900	1200	1500	1800
12 x 6 1/2	35.0	700	1050	1400	1750	2100
12 x 8	40.0	800	1200	1600	2000	2400
12 x 8	45.0	900	1350	1800	2250	2700
12 x 8	50.0	1000	1500	2000	2500	3000
14 x 5	22.0	440	660	880	1100	1320
14 x 5	26.0	520	780	1040	1300	1560
14 x 6 3/4	30.0	600	900	1200	1500	1800
14 x 6 3/4	34.0	680	1020	1360	1700	2040
14 x 8	43.0	860	1290	1720	2150	2580
14 x 10	61.0	1220	1830	2440	3050	3660
16 x 5 1/2	26.0	520	780	1040	1300	1560
16 x 5 1/2	31.0	620	930	1240	1550	1860
16 x 7	36.0	720	1080	1440	1800	2160
16 x 7	40.0	800	1200	1600	2000	2400
16 x 7	50.0	1000	1500	2000	2500	3000
16 x 7	57.0	1140	1710	2280	2850	3420
18 x 6	35.0	700	1050	1400	1750	2100
18 x 6	40.0	800	1200	1600	2000	2400
18 x 6	46.0	920	1380	1840	2300	2760
18 x 7 1/2	50.0	1000	1500	2000	2500	3000
18 x 7 1/2	55.0	1100	1650	2200	2750	3300
21 x 6 1/2	44.0	880	1320	1760	2200	2640
21 x 6 1/2	50.0	1000	1500	2000	2500	3000
21 x 8 1/4	68.0	1360	2040	2720	3400	4080
24 x 7	55.0	1100	1650	2200	2750	3300
24 x 7	76.0	1520	2280	3040	3800	4560
24 x 9	76.0	1520	2280	3040	3800	4560

ALSO AVAILABLE: Saw cutting and other grades.

JUNIOR BEAMS

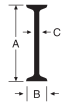
A529



Size	Lbs./Ft.	Flange Width	Web Thick.	Lbs. /20'	Lbs. /40'	Lbs. /50'	Lbs. /60'
A		B	C				
6	4.40	1.844	.114	88	176	220	264
8	6.50	2.281	.135	130	260	325	390
10	9.00	2.688	.155	180	360	450	540
12	11.80	3.063	.175	236	472	590	708

I BEAMS – STRUCTURAL

A-36 / A529



Size	Lbs./Ft.	Flange Width	Web Thick.	Lbs. /20'	Lbs. /40'	Lbs. /50'	Lbs. /60'
A		B	C				
3	5.70	2.330	.170	114	228	285	342
3	7.50	2.509	.349	150	300	375	450
4	7.70	2.663	.193	154	308	385	462
5	10.00	3.004	.214	200	400	500	600
6	12.50	3.332	.230	250	500	625	750
6	17.25	3.565	.465	345	690	863	1035
8	18.40	4.000	.270	368	736	920	1104
8	23.00	4.171	.441	460	920	1150	1380
10	25.40	4.660	.310	508	1016	1270	1524
10	35.00	4.944	.594	700	1400	1750	2100
12	31.80	5.000	.350	636	1272	1590	1908
15	42.90	5.500	.410	858	1716	2145	2574

Other grades available.

PLATE
Commercial Quality – A-36

3/16"	7.66#/Sq. Ft.	1/4"	10.21#/Sq. Ft.
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
36" x 96"	184	36" x 96"	245
36" x 120"	230	36" x 120"	307
36" x 144"	276	36" x 144"	368
48" x 96"	245	48" x 96"	327
48" x 120"	306	48" x 120"	408
48" x 144"	368	48" x 144"	490
48" x 240"	613	48" x 240"	817
48" x 480"	1226	48" x 480"	1634
60" x 96"	306	60" x 96"	408
60" x 120"	383	60" x 120"	511
60" x 144"	460	60" x 144"	613
60" x 240"	766	60" x 240"	1021
60" x 480"	1532	60" x 480"	2042
72" x 96"	368	72" x 96"	490
72" x 120"	460	72" x 120"	613
72" x 144"	552	72" x 144"	735
72" x 240"	919	72" x 240"	1225
72" x 480"	1838	72" x 480"	2450
84" x 96"	429	84" x 96"	572
84" x 120"	536	84" x 120"	715
84" x 144"	643	84" x 144"	858
84" x 240"	1072	84" x 240"	1430
84" x 480"	2145	84" x 480"	2859
96" x 96"	490	96" x 96"	653
96" x 120"	613	96" x 120"	817
96" x 144"	735	96" x 144"	980
96" x 240"	1226	96" x 240"	1634
96" x 480"	2451	96" x 480"	3268

INQUIRE REGARDING:
Sizes or grades not listed and processing to your specifications.

PLATE
Commercial Quality – A-36

5/16"		12.76#/Sq. Ft.		3/8"		15.32#/Sq. Ft.	
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
36" x 96"	306	36" x 96"	368	36" x 96"	368	36" x 96"	368
36" x 120"	383	36" x 120"	460	36" x 120"	460	36" x 120"	460
36" x 144"	460	36" x 144"	552	36" x 144"	552	36" x 144"	552
48" x 96"	408	48" x 96"	490	48" x 96"	490	48" x 96"	490
48" x 120"	510	48" x 120"	613	48" x 120"	613	48" x 120"	613
48" x 144"	612	48" x 144"	735	48" x 144"	735	48" x 144"	735
48" x 240"	1021	48" x 240"	1226	48" x 240"	1226	48" x 240"	1226
60" x 96"	510	60" x 96"	613	60" x 96"	613	60" x 96"	613
60" x 120"	638	60" x 120"	766	60" x 120"	766	60" x 120"	766
60" x 144"	766	60" x 144"	919	60" x 144"	919	60" x 144"	919
60" x 240"	1276	60" x 240"	1532	60" x 240"	1532	60" x 240"	1532
72" x 96"	612	72" x 96"	735	72" x 96"	735	72" x 96"	735
72" x 120"	766	72" x 120"	919	72" x 120"	919	72" x 120"	919
72" x 144"	919	72" x 144"	1103	72" x 144"	1103	72" x 144"	1103
72" x 240"	1531	72" x 240"	1838	72" x 240"	1838	72" x 240"	1838
84" x 96"	715	84" x 96"	858	84" x 96"	858	84" x 96"	858
84" x 120"	893	84" x 120"	1072	84" x 120"	1072	84" x 120"	1072
84" x 144"	1072	84" x 144"	1287	84" x 144"	1287	84" x 144"	1287
84" x 240"	1786	84" x 240"	2145	84" x 240"	2145	84" x 240"	2145
96" x 96"	817	96" x 96"	980	96" x 96"	980	96" x 96"	980
96" x 120"	1021	96" x 120"	1226	96" x 120"	1226	96" x 120"	1226
96" x 144"	1225	96" x 144"	1471	96" x 144"	1471	96" x 144"	1471
96" x 240"	2042	96" x 240"	2451	96" x 240"	2451	96" x 240"	2451

INQUIRE REGARDING:
Sizes or grades not listed and shear-to-size processing.

PLATE

Commercial Quality – A-36 / Grade 50

1/2"	20.42#/Sq. Ft.	5/8"	25.53#/Sq. Ft.
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
48" x 96"	653	48" x 96"	817
48" x 120"	817	48" x 120"	1021
48" x 144"	980	48" x 144"	1225
48" x 240"	1634	48" x 240"	2042
48" x 480"	3267	48" x 480"	4085
60" x 96"	817	60" x 96"	1021
60" x 120"	1021	60" x 120"	1277
60" x 144"	1225	60" x 144"	1532
60" x 240"	2042	60" x 240"	2553
60" x 480"	4084	60" x 480"	5106
72" x 96"	980	72" x 96"	1225
72" x 120"	1225	72" x 120"	1532
72" x 144"	1470	72" x 144"	1838
72" x 240"	2450	72" x 240"	3064
72" x 480"	4901	72" x 480"	6127
84" x 96"	1144	84" x 96"	1430
84" x 120"	1430	84" x 120"	1787
84" x 144"	1715	84" x 144"	2145
84" x 240"	2859	84" x 240"	3574
84" x 480"	5718	84" x 480"	7148
96" x 96"	1307	96" x 96"	1634
96" x 120"	1634	96" x 120"	2042
96" x 144"	1960	96" x 144"	2451
96" x 240"	3267	96" x 240"	4085
96" x 480"	6534	96" x 480"	8170

INQUIRE REGARDING:
 Sizes or grades not listed and press brake processing to your specification.

PLATE

Commercial Quality – A-36

3/4"		1"	
Width and Length	30.63#/Sq. Ft. Estimated Wt. per Sheet	Width and Length	40.84#/Sq. Ft. Estimated Wt. per Sheet
48" x 96"	980	48" x 96"	1307
48" x 120"	1225	48" x 120"	1634
48" x 144"	1470	48" x 144"	1960
48" x 240"	2450	48" x 240"	3267
48" x 480"	4901	48" x 480"	6534
60" x 96"	1225	60" x 96"	1634
60" x 120"	1532	60" x 120"	2042
60" x 144"	1838	60" x 144"	2450
60" x 240"	3063	60" x 240"	4084
60" x 480"	6126	60" x 480"	8168
72" x 96"	1470	72" x 96"	1960
72" x 120"	1838	72" x 120"	2450
72" x 144"	2205	72" x 144"	2940
72" x 240"	3676	72" x 240"	4901
72" x 480"	7351	72" x 480"	9802
84" x 96"	1715	84" x 96"	2287
84" x 120"	2144	84" x 120"	2859
84" x 144"	2573	84" x 144"	3431
84" x 240"	4288	84" x 240"	5718
84" x 480"	8576	84" x 480"	11435
96" x 96"	1960	96" x 96"	2614
96" x 120"	2450	96" x 120"	3267
96" x 144"	2940	96" x 144"	3921
96" x 240"	4901	96" x 240"	6534
96" x 480"	9802	96" x 480"	13069

INQUIRE REGARDING:
 Sizes or grades not listed and flame cut to size.

PLATE

Commercial Quality – A-36

1 1/4"	51.05#/Sq. Ft.	1 1/2"	61.26#/Sq. Ft.
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
48" x 96"	1634	48" x 96"	1960
48" x 120"	2042	48" x 120"	2450
48" x 144"	2450	48" x 144"	2940
48" x 240"	4084	48" x 240"	4901
48" x 480"	8168	48" x 480"	9802
60" x 96"	2042	60" x 96"	2450
60" x 120"	2553	60" x 120"	3063
60" x 144"	3063	60" x 144"	3676
60" x 240"	5105	60" x 240"	6126
60" x 480"	10210	60" x 480"	12252
72" x 96"	2450	72" x 96"	2940
72" x 120"	3063	72" x 120"	3676
72" x 144"	3676	72" x 144"	4411
72" x 240"	6126	72" x 240"	7351
72" x 480"	12252	72" x 480"	14702
84" x 96"	2859	84" x 96"	3431
84" x 120"	3574	84" x 120"	4288
84" x 144"	4288	84" x 144"	5146
84" x 240"	7147	84" x 240"	8576
84" x 480"	14294	84" x 480"	17153
96" x 96"	3267	96" x 96"	3921
96" x 120"	4084	96" x 120"	4901
96" x 144"	4901	96" x 144"	5881
96" x 240"	8168	96" x 240"	9802
96" x 480"	16336	96" x 480"	19603

INQUIRE REGARDING:
 Sizes or grades not listed. Send your part patterns for quotations.

PLATE
Commercial Quality – A-36

2"	81.68#/Sq. Ft.	2 1/2"	102.10#/Sq. Ft.
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
48" x 96"	2614	48" x 96"	3267
48" x 120"	3267	48" x 120"	4084
48" x 144"	3921	48" x 144"	4901
48" x 240"	6534	48" x 240"	8168
48" x 480"	13069	48" x 480"	16336
60" x 96"	3267	60" x 96"	4084
60" x 120"	4084	60" x 120"	5105
60" x 144"	4901	60" x 144"	6126
60" x 240"	8168	60" x 240"	10210
60" x 480"	16336	60" x 480"	20420
72" x 96"	3921	72" x 96"	4901
72" x 120"	4901	72" x 120"	6126
72" x 144"	5881	72" x 144"	7351
72" x 240"	9802	72" x 240"	12252
72" x 480"	19603	72" x 480"	24504
84" x 96"	4574	84" x 96"	5718
84" x 120"	5718	84" x 120"	7147
84" x 144"	6861	84" x 144"	8576
84" x 240"	11435	84" x 240"	14294
84" x 480"	22870	84" x 480"	28588
96" x 96"	5228	96" x 96"	6534
96" x 120"	6534	96" x 120"	8168
96" x 144"	7841	96" x 144"	9804
96" x 240"	13069	96" x 240"	16336
96" x 480"	26138	96" x 480"	32672

INQUIRE REGARDING:
Sizes or grades not listed.

PLATE
Commercial Quality – A-36

3"	122.50#/Sq. Ft.	4"	163.36#/Sq. Ft.
Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
48" x 96"	3920	48" x 96"	5228
48" x 120"	4900	48" x 120"	6534
48" x 144"	5880	48" x 144"	7841
48" x 240"	9800	48" x 240"	13069
		48" x 480"	26138
60" x 96"	4900	60" x 96"	6534
60" x 120"	6125	60" x 120"	8168
60" x 144"	7350	60" x 144"	9802
60" x 240"	12250	60" x 240"	16336
		60" x 480"	32672
72" x 96"	5880	72" x 96"	7841
72" x 120"	7350	72" x 120"	9802
72" x 144"	8820	72" x 144"	11762
72" x 240"	14700	72" x 240"	19604
		72" x 480"	39208
84" x 96"	6860	84" x 96"	9148
84" x 120"	8575	84" x 120"	11435
84" x 144"	10290	84" x 144"	13722
84" x 240"	17150	84" x 240"	22870
		84" x 480"	45740
96" x 96"	7840	96" x 96"	10455
96" x 120"	9800	96" x 120"	13069
96" x 144"	11760	96" x 144"	15683
96" x 240"	19600	96" x 240"	26138
		96" x 480"	52276

INQUIRE REGARDING:
Sizes or grades not listed and plate thicker than 4".

HOT ROLLED SHEETS

Commercial Quality

Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
7 Ga. (.179") 7.500#/Sq. Ft.		10 Ga. (.1345") 5.625#/Sq. Ft.	
36" x 96"	180.0	(continued from previous column)	
36" x 120"	225.0	48" x 96"	180.0
36" x 144"	270.0	48" x 120"	225.0
48" x 96"	240.0	48" x 144"	270.0
48" x 120"	300.0	48" x 240"	450.0
48" x 144"	360.0	60" x 96"	225.0
48" x 240"	600.0	60" x 120"	281.3
60" x 96"	300.0	60" x 144"	337.5
60" x 120"	375.0	60" x 240"	562.5
60" x 144"	450.0	72" x 96"	270.0
60" x 240"	750.0	72" x 120"	337.5
72" x 96"	360.0	72" x 144"	405.0
72" x 120"	450.0	72" x 240"	675.0
72" x 144"	540.0	11 Ga. (.1196") 5.000#/Sq. Ft.	
72" x 240"	900.0	36" x 96"	120.0
8 Ga. (.164") 6.875#/Sq. Ft.		36" x 120"	150.0
36" x 96"	165.0	36" x 144"	157.5
36" x 120"	206.3	48" x 96"	160.0
36" x 144"	247.5	48" x 120"	200.0
48" x 96"	220.0	48" x 144"	240.0
48" x 120"	275.0	48" x 240"	400.0
48" x 144"	330.0	60" x 96"	200.0
48" x 240"	550.0	60" x 120"	250.0
60" x 96"	275.0	60" x 144"	300.0
60" x 120"	343.8	60" x 240"	500.0
60" x 144"	412.5	72" x 96"	240.0
60" x 240"	687.5	72" x 120"	300.0
72" x 96"	330.0	72" x 144"	360.0
72" x 120"	412.5	72" x 240"	600.0
72" x 144"	495.0	12 Ga. (.1046") 4.375#/Sq. Ft.	
72" x 240"	825.0	36" x 96"	105.0
10 Ga. (.1345") 5.625#/Sq. Ft.		36" x 120"	131.3
36" x 96"	135.0	36" x 144"	157.5
36" x 120"	168.8	48" x 96"	140.0
36" x 144"	202.5	48" x 120"	175.0
(continued at top of next column)		48" x 144"	210.0
		48" x 240"	350.0

HOT ROLLED SHEETS

Commercial Quality

COLD ROLLED SHEETS

Commercial Quality

Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
12 Ga. (.1046") 4.375#/Sq. Ft.		16 Ga. (.0598") 2.500#/Sq. Ft.	
(continued from previous page)		36" x 96"	60.0
60" x 96"	175.0	36" x 120"	75.0
60" x 120"	218.8	36" x 144"	90.0
60" x 144"	262.5	48" x 96"	80.0
60" x 240"	437.5	48" x 120"	100.0
72" x 96"	210.0	48" x 144"	120.0
72" x 120"	262.5	60" x 96"	100.0
72" x 144"	315.0	60" x 120"	125.0
72" x 240"	525.0	60" x 144"	150.0
14 Ga. (.0747") 3.125#/Sq. Ft.		18 Ga. (.0478") 2.000#/Sq. Ft.	
36" x 96"	75.0	36" x 96"	48.0
36" x 120"	93.8	36" x 120"	60.0
36" x 144"	112.5	48" x 96"	64.0
48" x 96"	100.0	48" x 120"	80.0
48" x 120"	125.0	20 Ga. (.0359") 1.500#/Sq. Ft.	
48" x 144"	150.0	36" x 96"	36.0
60" x 96"	125.0	36" x 120"	45.0
60" x 120"	156.3	48" x 96"	48.0
60" x 144"	187.5	48" x 120"	60.0
72" x 96"	150.0	<h1 style="margin: 0;">COLD REDUCED AND TEMPER PASSED IN STOCK</h1>	
72" x 120"	187.5		
72" x 144"	225.0		
16 Ga. (.0598") 2.500#/Sq. Ft.			
36" x 96"	60.0		
36" x 120"	75.0		
36" x 144"	90.0		
48" x 96"	80.0		
48" x 120"	100.0		
48" x 144"	120.0		
60" x 96"	100.0		
60" x 120"	125.0		
60" x 144"	150.0		

INQUIRE REGARDING: Sizes or grades not listed.
 Temper Passed - Grade 50 - Grade 60 - AR200 - AR400 - ARP&O
 Stainless steel sheet and aluminum sheet
 are available upon request for immediate shipment.

SAFETY FLOOR PLATES

Width and Length	Estimated Wt. per Sheet	Width and Length	Estimated Wt. per Sheet
16 Ga. 3.00#/Sq. Ft.		3/16" 8.71#/Sq. Ft.	
48" x 96"	96	(continued from previous column)	
48" x 120"	120	72" x 96"	418
14 Ga. 3.75#/Sq. Ft.		72" x 120"	523
48" x 96"	120	72" x 144"	627
48" x 120"	150	72" x 240"	1045
12 Ga. 5.25#/Sq. Ft.		84" x 240"	1219
48" x 96"	168	96" x 240"	1394
48" x 120"	210	1/4" 11.26#/Sq. Ft.	
48" x 144"	252	48" x 96"	360
60" x 96"	210	48" x 120"	450
60" x 120"	263	48" x 144"	541
60" x 144"	315	48" x 240"	901
1/8" 6.16#/Sq. Ft.		60" x 96"	450
48" x 96"	197	60" x 120"	563
48" x 120"	246	60" x 144"	676
48" x 144"	296	60" x 240"	1126
48" x 240"	493	72" x 96"	541
60" x 96"	246	72" x 120"	676
60" x 120"	308	72" x 144"	811
60" x 144"	370	72" x 240"	1351
60" x 240"	616	84" x 240"	1576
72" x 96"	296	96" x 240"	1802
72" x 120"	370	3/8" 16.37#/Sq. Ft.	
72" x 144"	443	48" x 96"	524
72" x 240"	739	48" x 120"	655
3/16" 8.71#/Sq. Ft.		48" x 144"	786
48" x 96"	279	60" x 120"	819
48" x 120"	348	60" x 144"	982
48" x 144"	418	1/2" 21.47#/Sq. Ft.	
48" x 240"	697	48" x 96"	687
60" x 96"	348	48" x 120"	859
60" x 120"	436	48" x 144"	1031
60" x 144"	523		
60" x 240"	871		

(continued at top of next column)

EXPANDED METAL

Style Designation	Lbs./ Sq. Ft.	Size of Opening in Inches		Center to Center of Bridges in Inches		Size of Strands in Inches		
		Plain	Width	Length	Width	Length	Width	Length
1/2" - 13	1.47		5/16	15/16	.500	1.2	.092	.096
3/4" - 16 Hy	.54		13/16	1 3/4	.923	2.0	.060	.101
3/4" - 13	.80		3/4	1 11/16	.923	2.0	.092	.096
3/4" - 9	1.80		11/16	1 9/16	.923	2.0	.134	.150
1 1/2" - 9	1.20	1	1/8	2 3/8	1.330	3.0	.134	.144
1 1/2" - 6	2.50	1		2 5/16	1.330	3.0	.198	.203

FLATTENED EXPANDED METAL

Style Designation	Lbs./ Sq. Ft.	Size of Opening in Inches		Center to Center of Bridges in Inches		Approximate Thickness of Strands in Inches	
		Plain	Width	Length	Width		Length
1/4" - 18 - 20	1.11		3/32	11/16	.255	1.031	.040
1/2" - 18 - 20	.66		9/32	1	.500	1.260	.039
1/2" - 16 - 18	.82		1/4	1	.500	1.260	.050
1/2" - 13 - 15	1.40		1/4	1	.500	1.260	.070
3/4" - 16 - 18 Hy	.51		3/4	1 3/4	.923	2.100	.048
3/4" - 13 - 15	.75		11/16	1 25/32	.923	2.100	.070
3/4" - 9 - 11	1.71		9/16	1 11/16	.923	2.120	.120
1 1/2" - 13 - 15	.57	1	1/16	2 3/4	1.330	3.200	.070
1 1/2" - 9 - 11	1.14	1		2 9/16	1.330	3.200	.110

WALKWAY, SKYWALK and GRATINGS

Style Designation	Lbs./ Sq. Ft.	Size of Opening in Inches		Center to Center of Bridges in Inches		Size of Strands in Inches		
		Plain	Width	Length	Width	Length	Thick	Width
Walkway	4.27	1		2 7/8	1.412	4.00	.250	.300
Skywalk	3.14	1	5/8	4 7/8	2.000	6.00	.250	.312
3.0 lb. Grating	3.00		15/16	3 7/16	1.333	5.33	.183	.264
4.0 lb. Grating	4.00		15/16	3 7/16	1.333	5.33	.215	.300

All dimensions and weights are approximate and are subject to mill tolerances.

BAR GRATING

(Non-serrated) Inquire for other sizes or styles.

Style	Designation	Size	Lbs./Each
1 x 3/16	19w4	3' x 20'	426
1 1/4 x 3/16	19w4	3' x 20'	522

DECK SPAN

(Galvanized) Inquire for other sizes or styles.

Size	Gauge	Length	Lbs./Each
2" x 11 3/4"	12 Ga.	12'	74.44

REINFORCING (REBAR)

Size	Bar No.	Lbs./Ft.	Lbs./20'
3/8	3	.376	7.52
1/2	4	.668	13.36
5/8	5	1.043	20.86
3/4	6	1.502	30.04
7/8	7	2.044	40.88
1	8	2.670	53.40
1 1/8	9	3.400	68.00
1 1/4	10	4.303	86.06
1 3/8	11	5.313	106.26

Rebar stocked in lengths of 20' and 40'. Grade 40, 60 and no grade.
INQUIRE REGARDING: Cut lengths.

REINFORCING MESH

Style	Lbs./c.s.f	Rolls 5' x 150' Lbs.	Flat Sheet 8' x 20' Lbs.
6 x 6 - 10/10 (6 x 6 - W1.4 x W1.4)	21	157	33.6
6 x 6 - 8/8 (6 x 6 - W2.1 x W2.1)	30	225	48.0
6 x 6 - 6/6 (6 x 6 - W2.9 x W2.9)	42	315	67.2
6 x 6 - 4/4 (6 x 6 - W4 x W4)	58	435	92.8

GRADER and LOADER BUCKET BLADES

Single Bevel Flat — Weld-On Type

Size	Type	Lbs./Ft.	Length
3/8 x 3	SB	3.33	19' 1"
1/2 x 4	SB	6.04	20' 6"
1/2 x 6	SB	9.45	41' 0"
5/8 x 6	SB	11.66	24' 6"
3/4 x 4	SB	8.48	24' 6"
3/4 x 6	SB	13.60	41' 0"

INQUIRE REGARDING:

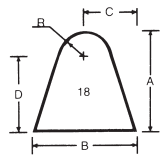
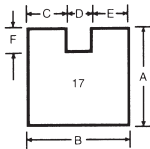
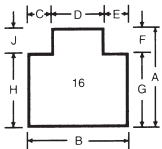
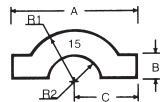
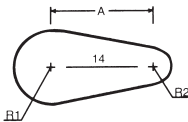
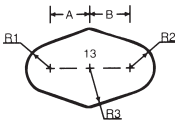
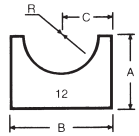
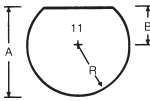
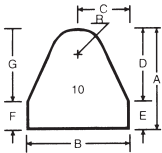
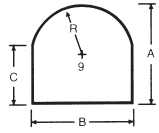
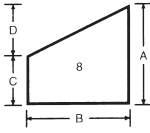
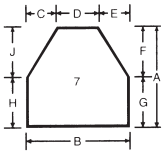
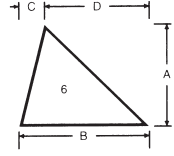
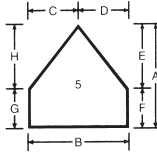
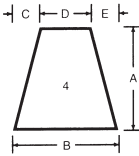
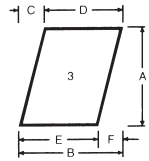
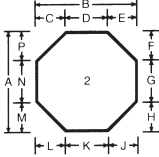
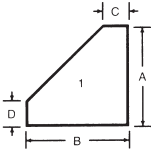
Replacement blades for any earth moving equipment
Steel bar joists - Steel roof deck - Structural steel processing
Reinforcing steel processing - Pre-production processing

DECIMAL EQUIVALENTS

1/64 ~~~~ .015625	33/64 ~~~~ .515625
1/32 ~~~~~ .03125	17/32 ~~~~~ .53125
3/64 ~~~~ .046875	35/64 ~~~~ .546875
1/16 ~~~~~ .0625	9/16 ~~~~~ .5625
5/64 ~~~~ .078125	37/64 ~~~~ .578125
3/32 ~~~~~ .09375	19/32 ~~~~~ .59375
7/64 ~~~~ .109375	39/64 ~~~~ .609375
1/8 ~~~~~ .125	5/8 ~~~~~ .625
9/64 ~~~~ .140625	41/64 ~~~~ .640625
5/32 ~~~~~ .15625	21/32 ~~~~~ .65625
11/64 ~~~~ .171875	43/64 ~~~~ .671875
3/16 ~~~~~ .1875	11/16 ~~~~~ .6875
13/64 ~~~~ .203125	45/64 ~~~~ .703125
7/32 ~~~~~ .21875	23/32 ~~~~~ .71875
15/64 ~~~~ .234375	47/64 ~~~~ .734375
1/4 ~~~~~ .25	3/4 ~~~~~ .75
17/64 ~~~~ .265625	49/64 ~~~~ .765625
9/32 ~~~~~ .28125	25/32 ~~~~~ .78125
19/64 ~~~~ .296875	51/64 ~~~~ .796875
5/16 ~~~~~ .3125	13/16 ~~~~~ .8125
21/64 ~~~~ .328125	53/64 ~~~~ .828125
11/32 ~~~~~ .34375	27/32 ~~~~~ .84375
23/64 ~~~~ .359375	55/64 ~~~~ .859375
3/8 ~~~~~ .375	7/8 ~~~~~ .875
25/64 ~~~~ .390625	57/64 ~~~~ .890625
13/32 ~~~~~ .40625	29/32 ~~~~~ .90625
27/64 ~~~~ .421875	59/64 ~~~~ .921875
7/16 ~~~~~ .4375	15/16 ~~~~~ .9375
29/64 ~~~~ .453125	61/64 ~~~~ .953125
15/32 ~~~~~ .46875	31/32 ~~~~~ .96875
31/64 ~~~~ .484375	63/64 ~~~~ .984375
1/2 ~~~~~ .5	1 ~~~~~ 1.0

FLAME CUT SHAPES

Schematic method for describing flame cut shapes.
Refer to sketch number and dimensions.



NORFOLK IRON & METAL COLOR CODE

	tube	sheet	
22 ga.....		0.030	YELLOW
20 ga.....	0.035	0.036	LIGHT BLUE
18 ga.....	0.049	0.048	BLACK
16 ga.....	0.065	0.060	LIGHT GREEN
15 ga.....	0.072	0.067	WHITE
14 ga.....	0.083	0.075	PINK
13 ga.....	0.095	0.090	COLONIAL WHITE
12 ga.....	0.109	0.105	YELLOW
11 ga.....	0.120	0.120	BLUE
10 ga.....	0.134	0.134	PURPLE
8 ga.....		0.164	BLACK
7 ga.....	0.188	0.180	MAUVE
A36.....			COLOR + BLUE STRIPE
AR 200 Plate.....			COLOR + YELLOW STRIPE
AR 400 Plate.....			COLOR + GREEN STRIPE
NONCLAIMABLE.....			COLOR + WHITE STRIPE
1/8.....	0.125		BLUE
3/16.....	0.188		RED
1/4.....	0.250		MEDIUM GREEN
5/16.....	0.313		PINK
3/8.....	0.375		YELLOW
7/16.....	0.438		FLUORESCENT GREEN
1/2.....	0.500		WHITE
9/16.....	0.562		PURPLE
5/8.....	0.625		ORANGE
11/16.....	0.687		FOREST GREEN
3/4.....	0.750		GRAY
13/16.....	0.812		COLONIAL WHITE
7/8.....	0.875		BLACK
15/16.....	0.937		LIGHT GREEN
1.....	1.000		PURPLE
1 1/16.....	1.062		LIGHT GREEN
1 1/8.....	1.125		BLUE
1 3/16.....	1.188		RED
1 1/4.....	1.250		MEDIUM GREEN
1 5/16.....	1.313		PINK
1 3/8.....	1.375		YELLOW
1 7/16.....	1.438		FLUORESCENT GREEN
1 1/2.....	1.500		WHITE
1 5/8.....	1.625		ORANGE
1 3/4.....	1.750		GRAY
1 7/8.....	1.875		BLACK
1 15/16.....	1.937		LIGHT GREEN
2.....	2.000		PURPLE
2 3/16.....	2.188		RED
2 1/4.....	2.250		MEDIUM GREEN
2 3/8.....	2.375		YELLOW
2 7/16.....	2.438		FLUORESCENT GREEN
2 1/2.....	2.500		WHITE
2 3/4.....	2.750		GRAY
2 15/16.....	2.937		LIGHT GREEN

NORFOLK IRON & METAL COLOR CODE

	tube	
3	3.000	PURPLE
3 7/16	3.438	FLUORESCENT GREEN
3 1/2	3.500	WHITE
4	4.000	PURPLE
X Heavy Pipe USA		RED
XX Heavy Pipe		GREEN
Reject Pipe Size Tubing		PURPLE
Pipe Size Tubing		LIGHT BLUE
Nonbendable Rebar		YELLOW
No Grade Semi-Bendable Rebar		BLUE & YELLOW STRIPE
Rebar No Grade		BLUE
Rebar Grade 40		MEDIUM GREEN
Rebar Grade 60		RED
Rebar A706 (weldable)		WHITE
Remesh 10/10		PURPLE
Remesh 8/8		YELLOW
Remesh 6/6		RED
Remesh 4/4		GREEN
Junior Channel		BLUE
2nd Weight Channel		RED
3rd Weight Channel		GREEN
Ship and Car Channel		WHITE
CR Rd. Stressproof		FLUORESCENT GREEN
CR Rd. C 1045		COPPER
CR Rd. 12L 14		BROWN
C1144 Stress Relieved		LIGHT BLUE
CE Plate & Sheet (Cut Edge)		COLOR + COPPER STRIPE
Secondary Sheet & Plate		COLOR + BROWN STRIPE
Special Material		FLUORESCENT DARK RED
Modified		COLOR + LIGHT BLUE STRIPE
A36		COLOR + BLUE STRIPE
Grade 50 Standard		COLOR + LIGHT BLUE STRIPE
Grade 50 Formable		COLOR + YELLOW STRIPE
GR 50 Unformable		COLOR + PEACH STRIPE
Grade 60		COLOR + RED STRIPE
GR 80		COLOR + BLACK STRIPE
A514		PURPLE STRIPE
Bent, Wavy or Damaged Steel		COLOR + BROWN STRIPE
Reject Material		FLUORESCENT ORANGE
Rusty		FLUORESCENT GREEN
P & O (Pickled & Oiled)		CHROME ALUMINUM
Sheared Strip		COLOR + COPPER STRIPE
Temper Passed		COLOR + PINK STRIPE
Cold Reduced		COLOR + GOLD STRIPE

NORFOLK IRON & METAL

TERMS and CONDITIONS

The following terms and conditions govern all sales of goods identified in this Sales Invoice from Norfolk Iron & Metal Co. (NIM) to Purchaser, whether made pursuant to oral or written purchase orders or otherwise, and are hereby deemed to be accepted by Purchaser. Any terms which are different than or additional to the terms contained in this Sales Invoice are objected to and hereby rejected by NIM. This Sales Invoice may not be altered or modified except in writing duly executed by an authorized officer of NIM and Purchaser.

1. Open account terms are subject to prior credit investigation and credit approval.
2. Reasonable doubt of Purchaser's financial responsibility shall entitle NIM to stop production of purchaser's order, decline shipments or stop any material in transit without liability, until Purchaser shall have paid for the material or satisfied NIM of its financial responsibility, which may include, without limitation, furnishing NIM a clean letter of credit supporting purchaser's obligations to NIM.
3. Unless otherwise specified on the face of this Sales Invoice, payment is due within 10 days following delivery to Purchaser. Accounts past due shall bear interest from the due date until paid in full at a rate equal to the lesser of (i) 18% per annum or (ii) the highest rate per annum allowed by law. Purchaser shall be responsible for all sales, use, excise, or other taxes (other than tax on NIM's income) not shown on the face of this Sales Invoice.
4. NIM will not be responsible for loss or damage arising from delays caused by strikes, fires, accidents, floods, delays of carriers, rolling mills, or others, or any cause beyond NIM's control, but NIM will use commercially reasonable efforts to meet delivery times specified on the order. Acceptance of material on delivery shall constitute a waiver of any claims for losses, expenses or damages of any nature on account of delay.
5. When not otherwise provided for, material and workmanship will be in accordance with the code of standard practices, American Institute of Steel Construction.
6. No retainage will be allowed on any job at any time.
7. Any claim by Purchaser against NIM for shortage or damage occurring prior to such delivery must be made within 5 days of shipment and accompanied by the original transportation bill signed by the carrier noting that the carrier received the goods from NIM in the condition claimed.
8. NIM's written consent must be obtained before returning any materials.
9. Delivery shall be in accordance with the delivery provisions contained on the face of this Sales Invoice. Unless otherwise specified on the face of this Sales Invoice, Purchaser shall pay all freight, shipping and handling fees. Risk of damage or loss shall pass to Purchaser once NIM has delivered the goods to the carrier. NIM shall not be responsible for any damage while the goods are in transit via common carrier. Any claims Purchaser may have due to damage in transit shall be made by Purchaser against the carrier and Purchaser is responsible for maintaining insurance on goods during transit.

NORFOLK IRON & METAL

TERMS and CONDITIONS

10. IN NO EVENT SHALL NIM BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES (INCLUDING BUT NOT LIMITED TO SUCH DAMAGES ARISING FROM BREACH OF CONTRACT OR WARRANTY OR FROM NEGLIGENCE OR STRICT LIABILITY), OR FOR LOST PROFITS, ARISING OUT OF OR IN CONNECTION WITH THIS AGREEMENT OR PURCHASER'S USE OF THE GOODS PURCHASED HEREUNDER, EVEN IF NIM HAS BEEN ADVISED OF (OR KNOWS OR SHOULD KNOW OF) THE POSSIBILITY OF SUCH DAMAGES, AND SHALL APPLY REGARDLESS OF THE SUCCESS OR EFFECTIVENESS OF OTHER REMEDIES. **NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS AGREEMENT TO THE CONTRARY, NIM'S SOLE AND CUMULATIVE LIABILITY TO PURCHASER OR ANY OTHER PARTY FOR ANY LOSSES, DAMAGES, CLAIMS, FINES OR EXPENSES OF ANY NATURE NOT DISCLAIMED ABOVE ARISING OUT OF OR WITH RESPECT TO THIS AGREEMENT SHALL BE LIMITED TO THE REPAIR OR REPLACEMENT OF THE PRODUCT OR A REFUND OF THE PURCHASE PRICE FOR THE GOODS.**

THE FOREGOING LIMITATIONS SHALL APPLY AND SURVIVE NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY REMEDY.

11. PURCHASER ACKNOWLEDGES THAT NIM DID NOT MANUFACTURE THE GOODS, AND THAT NIM IS ONLY A DISTRIBUTOR OF THE GOODS.

THERE ARE NO WARRANTIES WITH RESPECT TO THE GOODS PURCHASED HEREUNDER, EXPRESS OR IMPLIED, BY OPERATION OF LAW OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF TITLE, MERCHANTABILITY, FITNESS FOR INTENDED USE OR NON-INFRINGEMENT, OR ANY IMPLIED WARRANTIES ARISING OUT OF COURSE OF PERFORMANCE, COURSE OF DEALING OR USAGE OF TRADE. NO REPRESENTATION OR OTHER AFFIRMATION OF FACT, INCLUDING WITHOUT LIMITATION STATEMENTS REGARDING CAPACITY, SUITABILITY FOR USE, OR PERFORMANCE OF THE GOODS, WHETHER MADE BY NIM OR OTHERWISE, SHALL BE DEEMED TO BE A WARRANTY FOR ANY PURPOSE OR GIVE RISE TO ANY LIABILITY OF SELLER. No claim for damages for goods that do not conform to specifications will be allowed unless NIM is given immediate notice after delivery of goods to the first destination to which they are shipped and allowed an opportunity to inspect them. Goods for which damages are claimed require NIM's written consent before being returned, repaired or discarded. (PURCHASER'S EXCLUSIVE REMEDY AND NIM'S SOLE LIABILITY SHALL BE LIMITED TO NIM REPLACING GOODS THAT DO NOT CONFORM TO SPECIFICATIONS, OR AT NIM'S OPTION TO REFUND THE PURCHASE PRICE OF THE GOODS. The exact cost of back charges must be approved by NIM before the work is done.

12. All material shipped from the warehouse shall be invoiced in accordance with NIM's current published schedules of weight, areas, bundles and standard lengths, which govern all settlements.

JMP/289006.2

USEFUL INFORMATION

- CIRCUMFERENCE OF A CIRCLE Diameter x 3.1416
- DIAMETER OF A CIRCLECircumference x 0.31931
- AREA OF A CIRCLE.....Square of Diameter x 0.7854
- AREA OF A RECTANGLE..... Length x Breadth
- AREA OF A TRIANGLEBase x 1/2 of Perpendicular Height
- AREA OF AN ELLIPSE Product of Both Diameters x 0.7854
- AREA OF A PARALLELOGRAMBase x Altitude
- SIDE OF AN EQUAL SQUARE..... Diameter x 0.8862
- SIDE OF AN INSCRIBED SQUARE Diameter x 0.7071
 - OR -Circumference x 0.2251
 - OR - Circumference ÷ 4.4428
- CUBIC INCHES IN A BALL.....Cube of Diameter x 0.5236
- CUBIC CONTENTS OF A CONEArea of Base x 1/3 the Altitude
- SURFACE OF FRUSTRUM OF CONE OR PYRAMID.....
 - Sum of the Circumference
of both Ends x 1/2 Slant Height + Area of both Ends
- CONTENTS OF FRUSTRUM OF CONE OR PYRAMID
 - Square Root of the Product
of the Area of both Ends + Area of both Ends x 1/3 the Altitude
- A side of an inscribed square equals radius of a sphere multiplied by 1.1547.
- One cubic foot equals 7.5 gallons
- Doubling the diameter of a circle increases its area four times.
- Doubling the diameter of a pipe increases its capacity four times.
- A side of a square multiplied by 1.4142 equals the diameter of its circumscribing circle.