Your Steel Service Center

Shearing
Cut to Length
Flame Cutting
Press Brake Work
Punching
Rebar Cut to Length
Sawing and Mitering
Steel Joists
Steel Roof Deck
Structural Steel

B&C STEEL

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Steel Reference Guide

B&C STEEL

Steel For Life

Dear Friend,

Thank you for your interest in B&C Steel. For the past 60 years you have helped us grow from very humble beginnings to becoming a major supplier of structural steel in the greater Wyo-Braska area.

We consistently stock more than a million pounds of material that we can process and ship to meet your needs.

We hope this book will be helpful as a quick reference to the basic steel shapes that we carry. Please remember that if what your looking for is not in the book you can call us, and with the vast resources available to us we can likely accommodate your needs in a timely manner. We are constantly adjusting our inventory to best suit the needs of our customers.

On behalf of our entire team at B&C Steel we thank you for your business and wish you success in every endeavor.

Sincerely,

B&C Steel Corp.

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ANGLES

A-36

Size A		B		C	Lbs./Ft.	Lbs./20'
1/2	x	1/2	x	1/8	0.38	7.60
3/4	x	3/4	x	1/8	0.59	11.80
1	x	1	x	1/8	0.80	16.00
1	x	1	x	3/16	1.16	23.20
1	x	1	x	1/4	1.49	29.80
1 1/4	x	1 1/4	x	1/8	1.01	20.20
1 1/4	x	1 1/4	x	3/16	1.48	29.60
1 1/4	x	1 1/4	x	1/4	1.92	38.40
1 1/2	x	1 1/2	x	1/8	1.23	24.60
1 1/2	x	1 1/2	x	3/16	1.80	36.00
1 1/2	x	1 1/2	x	1/4	2.34	46.80
1 3/4	x	1 3/4	x	1/8	1.44	28.80
1 3/4	x	1 3/4	x	3/16	2.12	42.40
1 3/4	x	1 3/4	x	1/4	2.77	55.40
2	x	2	x	1/8	1.65	33.00
2	x	2	x	3/16	2.44	48.80
2	x	2	x	1/4	3.19	63.80
2	x	2	x	3/8	4.70	94.00
2 1/2	x	2 1/2	x	3/16	3.07	61.40
2 1/2	x	2 1/2	x	1/4	4.10	82.00
2 1/2	x	2 1/2	x	3/8	5.90	118.00
3	x	3	x	3/16	3.71	74.20
3	x	3	x	1/4	4.90	98.00
3	x	3	x	3/8	7.20	144.00
3	x	3	x	1/2	9.40	188.00
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
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
5	x	5	x	3/8	12.30	246.00
5	x	5	x	1/2	16.20	324.00

Continued

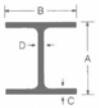
ANGLES

A-36

Size A		Size B		Size C	Lbs./Ft.	Lbs./20'
6	x	6	x	3/8	14.90	298.00
6	x	6	x	1/2	19.60	392.00
8	x	8	x	1	51.00	1020.00
						0.00
2	x	1 1/4	x	3/16	1.96	39.20
2	x	1 1/2	x	3/16	2.12	42.40
2	x	1 1/2	x	1/4	2.77	55.40
2 1/2	x	1 1/2	x	3/16	2.44	48.80
2 1/2	x	1 1/2	x	1/4	3.19	63.80
2 1/2	x	2	x	3/16	2.75	55.00
2 1/2	x	2	x	1/4	3.62	72.40
3	x	2	x	1/8	2.23	44.60
3	x	2	x	3/16	3.07	61.40
3	x	2	x	1/4	4.10	82.00
3	x	2	x	3/8	5.90	118.00
3	x	2 1/2	x	1/4	4.50	90.00
3	x	2 1/2	x	3/8	6.60	132.00
3 1/2	x	2 1/2	x	1/4	4.90	98.00
3 1/2	x	2 1/2	x	3/8	7.20	144.00
3 1/2	x	3	x	1/4	5.40	108.00
4	x	3	x	1/4	5.80	116.00
4	x	3	x	1/4	5.80	116.00
4	x	3	x	3/8	8.50	170.00
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
5	x	3	x	1/4	6.60	132.00
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	3/8	10.40	208.00
6	x	4	x	5/16	10.30	206.00
6	x	4	x	3/8	12.30	246.00
6	x	4	x	3/4	23.60	472.00
7	x	4	x	3/8	13.60	272.00
8	x	4	x	1/2	19.60	392.00

Wide Flange Beams

A992



Nominal Size in Inches	Lbs. /Ft.	Depth of Section in Inches A	Flange Width in Inches B	Flange Thickness in Inches C	Web Thickness in Inches D
4 x 4	13.0	4.16	4.060	0.345	0.280
5 x 5	19.0	5.15	5.030	0.430	0.270
6 x 4	12.0	6.03	4.000	0.280	0.230
6 x 6	15.0	5.99	5.990	0.260	0.230
6 x 6	25.0	6.38	6.080	0.455	0.320
8 x 4	10.0	7.89	3.940	0.205	0.170
8 x 4	13.0	7.99	4.000	0.255	0.230
8 x 4	15.0	8.11	4.015	0.315	0.245
8 x 5 1/4	18.0	8.14	5.250	0.330	0.230
8 x 5 1/4	21.0	8.28	5.270	0.400	0.250
8 x 6 1/2	24.0	7.93	6.495	0.400	0.245
8 x 6 1/2	28.0	8.06	6.535	0.465	0.285
8 x 8	31.0	8.00	7.995	0.435	0.285
8 x 8	35.0	8.12	8.020	0.495	0.310
8 x 8	48.0	8.50	8.110	0.685	0.400
10 x 4	12.0	9.87	3.960	0.210	0.190
10 x 4	15.0	9.99	4.000	0.270	0.230
10 x 4	17.0	10.11	4.010	0.330	0.240
10 x 4	19.0	10.24	4.020	0.395	0.250
10 x 5 3/4	22.0	10.17	5.750	0.360	0.240
10 x 5 3/4	26.0	10.33	5.770	0.440	0.260
10 x 5 3/4	30.0	10.47	5.810	0.510	0.300
10 x 8	33.0	9.73	7.950	0.435	0.290
10 x 8	39.0	9.92	7.985	0.530	0.315
10 x 10	49.0	9.98	10.000	0.560	0.340

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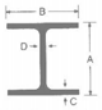
Wide Flange Beams
A992



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 4	14.0	11.91	3.970	0.225	0.200
12 x 4	16.0	11.99	3.990	0.265	0.220
12 x 4	19.0	12.16	4.005	0.350	0.235
12 x 4	22.0	12.31	4.030	0.425	0.260
12 x 6 1/2	26.0	12.22	6.490	0.380	0.230
12 x 6 1/2	30.0	12.34	6.520	0.440	0.260
12 x 6 1/2	35.0	12.50	6.560	0.520	0.300
12 x 8	40.0	11.94	8.005	0.515	0.295
12 x 8	45.0	12.06	8.045	0.575	0.335
14 x 5	22.0	13.74	5.000	0.335	0.230
14 x 5	26.0	13.91	5.025	0.420	0.255
14 x 6 3/4	30.0	13.84	6.730	0.385	0.270
14 x 6 3/4	34.0	13.98	6.745	0.455	0.285
14 x 10	61.0	13.89	9.995	0.645	0.375
14 x 13 3/4	38.0	14.10	6.770	0.515	0.310
16 x 5 1/2	26.0	15.69	5.500	0.345	0.250
16 x 5 1/2	31.0	15.88	5.525	0.440	0.275
16 x 7	36.0	15.86	6.985	0.430	0.295
16 x 7	40.0	16.01	6.995	0.505	0.305
16 x 7	50.0	16.26	7.070	0.630	0.380
18 x 6	35.0	17.70	6.000	0.425	0.300
18 x 6	40.0	17.90	6.015	0.525	0.315
18 x 6	50.0	17.99	7.495	0.570	0.355
18 x 11	76.0	18.21	11.035	0.680	0.425

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	7.5	2.509	0.349	150	300	375	450
4	7.7	2.663	0.193	154	308	385	462
5	10	3.004	0.214	200	400	500	600
6	12.5	3.332	0.232	250	500	625	750
7	15.3	3.662	0.252	306	612	765	918
8	18.4	4.001	0.271	368	736	920	1104
10	25.4	4.661	0.311	508	1016	1270	1524
12	31.8	5.000	0.350	636	1272	1590	1908
15	42.9	5.501	0.411	858	1716	2145	2574
18	54.7	6.001	0.461	1094	2188	2735	3282

Round Bars

Stock Lengths - 20' for A-36, C1018 & C1045 / 12' for C1144`

Size	Lbs./Ft.	A-36HR	C1018	C1045	C1144SR
1/8	0.042		x		
3/16	0.094		x		
1/4	0.167	x	x		
5/16	0.261	x	x		
3/8	0.376	x	x		x
7/16	0.511	x	x		x
1/2	0.668	x	x		x
9/16	0.845	x	x		x
5/8	1.043	x	x	x	x
11/16	1.262		x		
3/4	1.502	x	x	x	x
13/16	1.763		x		
7/8	2.045	x	x	x	x
15/16	2.347		x		x
1	2.670	x	x	x	x
1 1/16	3.020		x		
1 1/8	3.380	x	x	x	x
1 3/16	3.766		x	x	x
1 1/4	4.172	x	x	x	x
1 5/16	4.600		x		
1 3/8	5.050		x	x	x
1 7/16	5.518		x	x	x
1 1/2	6.010	x	x	x	x
1 9/16	6.520				
1 5/8	7.050		x	x	x
1 11/16	7.600				x
1 3/4	8.180		x	x	x
1 13/16	8.770				
1 7/8	9.390		x	x	x
1 15/16	10.020		x	x	x
2	10.680	x	x	x	x
2 1/16	11.360			x	
2 1/8	12.060			x	x
2 3/16	12.780			x	
2 1/4	13.520			x	x
2 3/8	15.060			x	x
2 7/16	15.870			x	x
2 1/2	16.690		x	x	x
2 5/8	18.400				
2 3/4	20.190			x	
2 7/8	22.070				x
2 15/16	23.040			x	x
3	24.030		x	x	x
3 7/16	31.550			x	x
3 1/2	32.710			x	x
4	42.730		x	x	x

Square Bars

Stock Lengths - 12' for C1018 / 20' for A36HR & HR1045

Size	Lbs./Ft.	A-36HR	C1018	HR1045
1/8	0.053		x	
3/16	0.120		x	
1/4	0.213		x	
5/16	0.332		x	
3/8	0.478	x	x	
1/2	0.850	x	x	
1/2 Twisted	0.850	x		
5/8	1.330	x	x	
3/4	1.910	x	x	x
7/8	2.600	x	x	x
1	3.400	x	x	x
1 1/8	4.300		x	x
1 1/4	5.310		x	x
1 1/2	6.008	x	x	
1 3/4	8.180		x	
2	10.668	x	x	
2 1/2	16.690		x	

Hex Bars

Stock Lengths - 12'

Size	Lbs./Ft.	C-1018
1/2	0.736	x
9/16	0.932	x
5/8	1.150	x
3/4	1.656	x
7/8	2.290	x
1	3.017	x
1/18	3.727	x
1 1/4	4.601	x
1 1/2	6.625	x
1 3/4	9.018	x
2	11.780	x
2 1/4	14.910	x

Structural Channel
A-36

Size A	Lbs./Ft.	Flange Width B	Web Thickness C	Lbs./20'	Lbs./40'
3	4.100	1.410	0.170	82	164
3	5.000	1.498	0.258	100	200
4	2.090	2.500	0.060	41.8	83.6
4	5.400	1.584	0.184	108	216
4	7.250	1.721	0.321	145	290
5	6.700	1.750	0.190	134	268
5	9.000	1.885	0.325	180	360
6	8.200	1.920	0.200	164	328
6	10.500	2.034	0.314	210	420
7	9.800	2.090	0.210	196	392
8	11.500	2.260	0.220	230	460
8	11.500	2.260	0.220	230	460
8	13.750	2.343	0.303	275	550
8	18.750	2.527	0.487	375	750
9	13.400	2.433	0.233	268	536
				0	0
10	8.400	1.875	0.180	168	336
10	15.300	2.600	0.240	306	612
10	20.000	2.739	0.379	400	800
12	10.600	1.500	0.190	212	424
12	20.700	2.942	0.282	414	828
12	25.000	3.047	0.387	500	1000
12	30.000	3.170	0.510	600	1200
15	33.900	3.400	0.400	678	1356

Channel - Bar Size
A-36

Size A		B		C	Lbs./Ft.	Lbs./20
1	x	1/2	x	1/8	0.840	16.8
1 1/4	x	1/2	x	1/8	1.010	20.2
1 1/2	x	1/2	x	1/8	1.120	22.4
2	x	9/16	x	3/16	1.860	37.2
2	x	1	x	1/8	1.590	31.8
2	x	1	x	3/16	2.320	46.4

Junior Channels
Stair Stringer Channels - A-36

Size A	Lbs./Ft.	Flange Width B	Web Thickness C	Lbs./20'
10	6.5	1.125	0.150	130
10	8.4	1.5	0.170	168
12	10.6	1.5	0.190	212

Flat Bars
A-36 & C1045

Size			Lbs./Ft.	Lbs./ 20'	A-36	C1045
1/8	x	1/2	0.213	4.26	x	
1/8	x	3/4	0.319	6.38	x	
1/8	x	1	0.425	8.5	x	
1/8	x	1 1/4	0.531	10.62	x	
1/8	x	1 1/2	0.638	12.76	x	
1/8	x	1 3/4	0.744	14.88	x	
1/8	x	2	0.850	17	x	
1/8	x	2 1/2	1.063	21.26	x	
1/8	x	3	1.275	25.5	x	
1/8	x	4	1.700	34	x	
1/8	x	5	2.125	42.5	x	
1/8	x	6	2.550	51	x	
3/16	x	1/2	0.319	6.38	x	

Continued

Flat Bars
A-36 & C1045

Size			Lbs./Ft.	Lbs./ 20'	A-36	C1045
3/16	x	3/4	0.479	9.58	x	
3/16	x	1	0.638	12.76	x	
3/16	x	1 1/4	0.797	15.94	x	
3/16	x	1 1/2	0.956	19.12	x	
3/16	x	1 3/4	1.116	22.32	x	
3/16	x	2	1.276	25.52	x	
3/16	x	2 1/2	1.594	31.88	x	
3/16	x	3	1.913	38.26	x	
3/16	x	3 1/2	2.231	44.62	x	
3/16	x	4	2.550	51	x	
3/16	x	5	3.188	63.76	x	
3/16	x	6	3.825	76.5	x	
1/4	x	1/2	0.425	8.5	x	
1/4	x	3/4	0.638	12.76	x	
1/4	x	1	0.850	17	x	
1/4	x	1 1/4	1.063	21.26	x	
1/4	x	1 1/2	1.275	25.5	x	
1/4	x	1 3/4	1.488	29.76	x	
1/4	x	2	1.700	34	x	
1/4	x	2 1/2	2.125	42.5	x	
1/4	x	3	2.550	51	x	
1/4	x	3 1/2	2.975	59.5	x	
1/4	x	4	3.400	68	x	
1/4	x	4 1/2	3.825	76.5	x	
1/4	x	5	4.250	85	x	
1/4	x	6	5.100	102	x	
1/4	x	8	6.800	136	x	
5/16	x	1 1/2	1.594	31.88	x	
5/16	x	2	2.125	42.5	x	
3/8	x	1	1.275	25.5	x	
3/8	x	1 1/4	1.594	31.88	x	
3/8	x	1 1/2	1.913	38.26	x	
3/8	x	1 3/4	2.231	44.62	x	
3/8	x	2	2.550	51	x	
3/8	x	2 1/2	3.188	63.76	x	
3/8	x	3	3.825	76.5	x	
3/8	x	3 1/2	4.463	89.26	x	
3/8	x	4	5.100	102	x	
3/8	x	5	6.375	127.5	x	

Continued

Flat Bars
A-36 & C1045

Size			Lbs./Ft.	Lbs./ 20'	A-36	C1045
3/8	x	5 1/2	7.013	140.26	x	
3/8	x	6	7.650	153	x	
3/8	x	8	10.200	204	x	
3/8	x	10	12.750	255	x	
1/2	x	1	1.700	34	x	
1/2	x	1 1/4	2.125	42.5	x	
1/2	x	1 1/2	2.550	51	x	
1/2	x	2	3.400	68	x	
1/2	x	2 1/2	4.254	85.08	x	
1/2	x	3	5.100	102	x	
1/2	x	3 1/2	5.950	119	x	
1/2	x	4	6.800	136	x	
1/2	x	4 1/2	7.650	153	x	
1/2	x	5	8.500	170	x	
1/2	x	6	10.200	204	x	
1/2	x	8	13.600	272	x	
1/2	x	10	17.000	340	x	
1/2	x	12	20.400	408	x	
5/8	x	1 1/4	2.656	53.12	x	
5/8	x	1 1/2	3.188	63.76	x	x
5/8	x	2	4.250	85	x	x
5/8	x	2 1/2	5.313	106.26	x	
5/8	x	3	6.375	127.5	x	
5/8	x	3 1/2	7.438	148.76	x	
5/8	x	4	8.500	170	x	
5/8	x	5	10.630	212.6	x	
5/8	x	6	12.750	255	x	
5/8	x	8	17.000	340	x	
5/8	x	10	21.250	425	x	
5/8	x	12	25.500	510	x	
3/4	x	1	2.550	51	x	
3/4	x	1 1/4	3.188	63.76	x	
3/4	x	1 1/2	3.825	76.5	x	
3/4	x	2	5.100	102	x	x
3/4	x	2 1/2	6.375	127.5	x	x
3/4	x	3	7.650	153	x	x
3/4	x	4	10.200	204	x	
3/4	x	5	12.750	255	x	
3/4	x	6	15.300	306	x	
3/4	x	8	20.400	408	x	

Continued

Flat Bars
A-36 & C1045

Size			Lbs./Ft.	Lbs./ 20'	A-36	C1045
3/4	x	10	25.500	510	x	
3/4	x	12	30.600	612	x	
1	x	2	6.800	136	x	
1	x	2 1/2	8.500	170	x	
1	x	3	10.200	204	x	x
1	x	4	13.600	272	x	
1	x	5	17.000	340	x	
1	x	6	20.400	408	x	
1	x	8	27.200	544	x	
1	x	10	34.000	680	x	
1	x	12	40.800	816	x	
1 1/2	x	2	10.200	204	x	
1 1/2	x	3	15.300	306	x	
1 1/2	x	6	30.600	612	x	
2	x	4	27.200	544	x	
2	x	6	40.800	816	x	

Single Bevel Flats

Size			Lbs./Ft.	Length
9/32	x	4	3.390	24'
3/8	x	3	3.340	20'-6"
1/2	x	4	6.070	20'-6"
1/2	x	6	9.500	20'-6"
3/4	x	6	13.590	20'-6"

Safety Floor Plate

Width and Length	Estimated Lbs./Sheet
14 Ga.	**3.75# / Sq. Ft.**
48" x 96"	120
48" x 120"	150
12 Ga.	**5.25# / Sq. Ft.**
48" x 96"	168
48" x 120"	210
1/8"	**6.16# / Sq. Ft.**
48" x 96"	197
48" x 120"	246
60" x 120"	308
3/16"	**8.71# / Sq. Ft.**
48" x 96"	279
48" x 120"	348
60" x 120"	348
1/4"	**11.26# / Sq. Ft.**
48" x 96"	360
48" x 120"	450
60" x 120"	563

Aluminum Floor Plate

Width and Length	Estimated Lbs./Sheet
1/8"	**1.92# / Sq. Ft.**
48" x 96"	61.44

Standard and Flattened Expanded Metal

Style Designation	Lbs./ Sq. Ft.	Approximate Size of Mesh Center to Center of Bridges	Sheet Size	Lbs./Sht.
1/4" - 18	1.14	.250 x 1.024	48" x 96"	36.48
1/2" - 13	1.47	.500 x 1.2	48" x 96"	47.04
3/4" - 10	0.8	.923 x 2.0	48" x 96"	25.6
3/4" - 9	1.8	.923 x 2.0	48" x 96"	57.6
1 1/2" - 9	1.2	1.33 x 3.00	48" x 96"	38.4

Grating

Style Designation	Lbs./ Sq. Ft.	Approximate Size of Mesh Center to Center of Bridges	Sheet Size	Lbs./Sht
3.0 lb. Grating	3	1.333 x 5.33	48" x 96"	96
4.0 lb. Grating	4	1.333 x 5.33	48" x 96"	128
4.0 lb. Grating	4	1.333 x 5.34	48" x 120"	160
4.0 lb. Grating	4	1.333 x 5.35	72" x 120"	240

Round Tubing

Size (OD)	Gauge	Lbs./ Ft.
3" (Pipe Size)	.216 Wall	7.58
4"	14 Ga.	3.20
	11 Ga.	4.90
4" (Pipe Size)	0.237	10.79
5"	14 Ga.	4.00
6"	12 Ga.	6.80
	10 Ga.	8.60
	3/16	11.60
6" (Pipe Size)	0.280	18.97
8"	12 Ga.	9.00
	10 Ga.	11.60
	3/16	15.60
10"	10 Ga.	14.50
	3/16	19.70
12"	10 Ga.	17.50
	3/16	23.70
14"	10 Ga.	20.40
	3/16	27.70
16"	10 Ga.	23.40
	1/4	42.10

Round Mechanical Tubing

Size (OD)	Gauge	Lbs./ Ft.
5/8"	14 Ga. (.083)	0.481
3/4"	15 Ga. (.072")	0.521
1"	14 Ga. (.083)	0.813
	11 Ga. (.120")	1.128
	0.156	1.406
	0.250	2.003
1.050" (3/4" P.S.)	0.113	1.130
1 1/8"	0.219	2.119
1 1/4"	14 Ga. (.083)	1.034
	11 Ga. (.120")	1.448
	0.219	2.441
	0.250	2.670
	0.281	2.908
1.315" (1" P.S)	0.133	1.680
1 3/8"	14 Ga. (.083)	1.145
	11 Ga. (.120")	1.608
	0.250	3.004
	0.375	4.005
1 1/2	15 Ga. (.072")	0.996
	14 Ga. (.083)	1.426
	11 Ga. (.120")	1.769
	0.219	2.996
	0.250	3.338
	0.375	4.506
1.660" (1 1/4" P.S.)	0.140	2.270
1 3/4	12 Ga. (.109")	1.700
	11 Ga. (.120")	2.089

Continued

Round Mechanical Tubing

Size (OD)	Gauge	Lbs./ Ft.
	0.250	4.005
	0.313	4.804
	0.375	5.507
	0.500	6.675
1.900" (1 1/2" P.S.)	0.145	2.720
2"	14 Ga. (.083)	1.699
	0.120	2.409
	0.250	4.673
	0.375	4.673
	0.438	6.508
2 1/4"	0.120	2.725
2.375" (2" P.S.)	0.154	3.650
2 1/2"	0.120	3.050
	0.250	6.008
2.875" (2 1/2" P.S)	0.203	5.790
3"	0.120	3.691
	0.500	13.350
4"	0.500	18.690
	1.000	32.040
5"	0.120	9.662
	0.250	12.680
	0.375	18.520

Black Plain End Pipe
Schedule 40 - Standard Wgt.

Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1/8	0.405	0.269	0.068	0.24
1/4	0.504	0.364	0.088	0.42
3/8	0.675	0.493	0.091	0.57
1/2	0.840	0.622	0.109	0.85
3/4	1.050	0.824	0.113	1.13
1	1.315	1.049	0.133	1.68
1 1/4	1.660	1.380	0.14	2.27
1 1/2	1.900	1.610	0.145	2.72
2	2.375	2.067	0.154	3.65
2 1/2	2.875	2.469	0.203	5.79
3	3.500	3.068	0.216	7.58
4	4.500	4.026	0.237	10.79
5	5.563	5.047	0.258	14.62
6	6.625	6.065	0.28	18.97
8	8.625	7.981	0.322	28.55
10	10.750	10.020	0.365	40.48
12	12.750	11.838	0.406	53.56

Extra Heavy Black Pipe P.E.
Schedule 80

Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
3/8	0.675	0.423	0.126	0.73
1/2	0.840	0.546	0.147	1.09
3/4	1.050	0.742	0.154	1.47
1	1.315	0.957	0.179	2.17
1 1/4	1.660	1.278	0.191	3.00
1 1/2	1.900	1.500	0.200	3.63
2	2.375	1.939	0.218	5.02
2 1/2	2.875	2.323	0.276	7.66
3	3.500	2.900	0.300	10.25
3 1/2	4.000	3.364	0.318	12.51
4	4.500	3.826	0.337	14.98
5	5.563	4.813	0.375	20.78
6	6.625	5.761	0.432	28.57
8	8.625	7.625	0.500	43.39

Schedule 160 Pipe

Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1 1/2	1.660	1.160	0.250	4.86
2	2.375	1.687	0.344	7.46
2 1/2	2.875	2.125	0.375	10.01
3	3.500	2.624	0.438	14.32
4	4.500	3.438	0.531	22.51

Double Extra Heavy Pipe

Size Inches	Outside Diameter	Inside Diameter	Wall Thickness	Lbs. Per Ft.
1	1.315	0.599	0.358	3.660
1 1/4	1.660	0.896	0.382	5.210
1 1/2	1.900	1.100	0.400	6.410
2	2.375	1.503	0.436	9.030
2 1/2	2.875	1.771	0.552	13.690
3	3.500	2.300	0.600	18.580
3 1/2	4.000	2.728	0.636	22.850
4	4.500	3.152	0.674	27.540

Plate
A-36 / A572

Width and Length			Estimated Wt. per Sheet
3/16"			**7.66# / Sq. Ft.**
48"	x	96"	184
48"	x	120"	306
60"	x	96"	306
60"	x	120"	383
72"	x	96"	368
72"	x	120"	460
96"	x	120"	613
1/4"			**10.21# / Sq. Ft.**
48"	x	96"	327
48"	x	120"	408
60"	x	96"	408
60"	x	120"	511
72"	x	96"	490
72"	x	120"	613
5/16"			**12.76# / Sq. Ft.**
48"	x	96"	408
48"	x	120"	510
60"	x	96"	510
60"	x	120"	638
72"	x	120"	766

Width and Length			Estimated Wt. per Sheet
5/8"			**25.53# / Sq. Ft.**
48"	x	96"	817
48"	x	120"	1021
60"	x	120"	1277
72"	x	120"	1532
3/4"			**30.63# / Sq. Ft.**
48"	x	96"	980
48"	x	120"	1225
60"	x	120"	1532
72"	x	120"	1838
1"			**40.84# / Sq. Ft.**
48"	x	96"	1307
48"	x	120"	1634
60"	x	120"	2042
1 1/4"			**51.05# / Sq. Ft.**
48"	x	120"	2042
1 1/2"			**61.26# / Sq. Ft.**
48"	x	120"	2450

Continued

Plate
A-36 / A572

Width and Length			Estimated Wt. per Sheet
3/8"			**15.32# / Sq. Ft.**
48"	x	96"	490
48"	x	120"	613
60"	x	96"	613
60"	x	120"	766
72"	x	120"	919
1/2"			**20.42# / Sq. Ft.**
48"	x	96"	653
48"	x	120"	817
60"	x	120"	1021
72"	x	120"	1225

Width and Length			Estimated Wt. per Sheet
2"			**81.68# / Sq. Ft.**
48"	x	120"	3267

Reinforcing (Rebar)

Stocked in 20' lengths - Grade 60

Size	Bar No.	Lbs./Ft.	Lbs./20'
3/8	3	0.376	7.52
1/2	4	0.668	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

Reinforcing Mesh

Stocked in 5' x 150' rolls

Style	Lbs. / Roll
6 x 6 - 10/10 (6 x 6 - W1.4 x W1.4)	157
6 x 6 - 6/6 (6 x 6 - W2.9 x W2.9)	315

Cold Rolled Sheets

Commercial Quality

Width and Length			Estimated Wt. per Sheet
18 Ga. (.0478")			**2.000# / Sq. Ft.**
48"	x	96"	64
48"	x	120"	80
20 Ga. (.0359")			**1.500# / Sq. Ft.**
48"	x	96"	48
48"	x	120"	60
22 Ga. (.0299")			**1.250# / Sq. Ft.**
48"	x	96"	980
48"	x	120"	1225
60"	x	120"	1532
72"	x	120"	1838

Hot Rolled Sheets

Commercial Quality

Width and Length			Estimated Wt. per Sheet
10 Ga. (.1345")			**5.625# / Sq. Ft.**
48"	x	96"	180
48"	x	120"	225
60"	x	96"	225
60"	x	120"	281.3
72"	x	120"	337.5
12 Ga. (.1046")			**4.375# / Sq. Ft.**
48"	x	96"	140
48"	x	120"	175
60"	x	96"	175
60"	x	120"	218.8
72"	x	120"	262.5
14 Ga. (.0747")			**3.125# / Sq. Ft.**
48"	x	96"	100
48"	x	120"	125
60"	x	96"	125
60"	x	120"	156.3
72"	x	120"	187.5
16 Ga. (.0598")			**2.500# / Ft.**
48"	x	96"	80
48"	x	120"	100
60"	x	96"	100
60"	x	120"	125

Galvanized Sheets

Width and Length	Estimated Wt. per Sheet
10 Ga. (.1345")	**5.781# / Sq. Ft.**
48" x 120"	231.24
12 Ga. (.1046")	**4.531# / Sq. Ft.**
48" x 120"	181.24
14 Ga. (.0747")	**3.281# / Sq. Ft.**
48" x 120"	125
16 Ga. (.0598")	**2.656# / Ft.**
48" x 120"	106.24
18 Ga. (.0478")	**2.156# / Sq. Ft.**
48" x 120"	86.24
20 Ga. (.0359")	**1.656# / Sq. Ft.**
48" x 120"	60
22 Ga. (.0299")	**1.406# / Sq. Ft.**
48" x 120"	56.24
24 Ga. (.0239")	**1.156# / Sq. Ft.**
48" x 120"	46.24
26 Ga. (.0179")	**.906# / Sq. Ft.**
48" x 120"	36.24
28 Ga. (.0149")	**.781# / Sq. Ft.**
36" x 120"	23.43

Square Tube

ASTM Grades A-513 (under 2") & ASTM A-500 Gr. B (2" & Over)

Size and Gauge		Wall Decimal	Wt. Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
1/2 x 1/2	16 Ga.	.065	0.384	7.68	9.22	15.36
				0.00	0.00	0.00
3/4 x 3/4	16 Ga.	.065	0.606	12.12	14.54	24.24
	11 Ga.	.120	1.028	20.56	24.67	41.12
1 x 1	14 Ga.	.083	1.035	20.70	24.84	41.40
	11 Ga.	.120	1.436	28.72	34.46	57.44
1 1/4 x 1 1/4	14 Ga.	.083	1.317	26.34	31.61	52.68
	11 Ga.	.120	1.844	36.88	44.26	73.76
	3/16"	.188	2.913	58.26	69.91	116.52
1 1/2 x 1 1/2	14 Ga.	.083	1.599	31.98	38.38	63.96
	12 Ga.	.109	2.062	41.24	49.49	82.48
	11 Ga.	.120	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	14 Ga.	.083	1.882	37.64	45.17	75.28
	11 Ga.	.120	2.660	53.20	63.84	106.40
2 x 2	14 Ga.	.083	2.164	43.28	51.94	86.56
	11 Ga.	.120	3.050	61.00	73.20	122.00
	3/16"	.188	4.320	86.40	103.68	172.80
	1/4"	.250	5.410	108.20	129.84	216.40
2 1/2 x 2 1/2	11 Ga.	.120	3.900	78.00	93.60	156.00
	3/16"	.188	5.590	111.80	134.16	223.60
	1/4"	.250	7.110	142.20	170.64	284.40
	.238"	.238	7.322	146.44	175.73	292.88

Continued

Square Tube

ASTM Grades A-513 (under 2") & ASTM A-500 Gr. B (2" & Over)

Size and Gauge		Wall Decimal	Wt. Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
3 x 3	11 Ga.	.120	4.750	95.00	114.00	190.00
	3/16"	.188	6.870	137.40	164.88	274.80
	1/4"	.250	8.810	176.20	211.44	352.40
	5/16"	.313	10.580	211.60	253.92	423.20
3 1/2 x 3 1/2	3/16"	.188	8.150	163.00	195.60	326.00
	1/4"	.250	10.510	210.20	252.24	420.40
	5/16"	.313	12.700	254.00	304.80	508.00
4 x 4	11 Ga.	.120	6.460	129.20	155.04	258.40
	3/16	.188	9.420	188.40	226.08	376.80
	1/4	.250	12.210	244.20	293.04	488.40
	5/16	.313	14.830	296.60	355.92	593.20
	3/8	.375	17.270	345.40	414.48	690.80
	1/2	.500	21.610	432.20	518.64	864.40
5 x 5	3/16	.188	11.970	239.40	287.28	478.80
	1/4	.250	15.260	305.20	366.24	610.40
	3/8	.375	22.370	447.40	536.88	894.80
	1/2	.500	28.430	568.60	682.32	1137.20
6 x 6	3/16	.188	14.530	290.60	348.72	581.20
	1/4	.250	19.020	380.40	456.48	760.80
	3/8	.375	27.480	549.60	659.52	1099.20
8 x 8	1/4	.250	25.820	516.40	619.68	1032.80
	3/8	.375	37.690	753.80	904.56	1507.60
12 x 12	1/4	.250	39.430	788.60	946.32	1577.20

Rectangle Tube

ASTM Grades A-513 (under 2") & ASTM A-500 Gr. B (2" & Over)

Size and Gauge		Wall Decimal	Wt. Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
1 1/2 x 1	14 Ga.	.083	1.317	26.34	31.608	52.68
2 x 1	14 Ga.	.083	1.599	31.98	38.376	63.96
2 x 1 1/2	14 Ga.	.083	1.882	37.64	45.168	75.28
	11 Ga.	.120	2.660	53.2	63.84	106.4
2 1/2 x 1 1/2	14 Ga.	.083	2.160	43.2	51.84	86.4
	11 Ga.	.120	3.070	61.4	73.68	122.8
	3/16"	.188	4.320	86.4	103.68	172.8
3 x 1	14 Ga.	.083	2.160	43.2	51.84	86.4
	11 Ga.		3.070	61.4	73.68	122.8
				0	0	0
3 x 1 1/2	14 Ga.	.083	2.446	48.92	58.704	97.84
	11 Ga.	.120	3.476	69.52	83.424	139.04
	3/16"	.188	4.970	99.4	119.28	198.8
3 x 2	14 Ga.	.083	2.728	54.56	65.472	109.12
	11 Ga.	.120	3.760	75.2	90.24	150.4
	3/16"	.188	5.590	111.8	134.16	223.6
	1/4"	.250	7.110	142.2	170.64	284.4
3 1/2 x 2 1/2	3/16"	.188	6.880	137.6	165.12	275.2
4 x 2	14 Ga.	.083	3.263	65.26	78.312	130.52
	11 Ga.	.120	4.580	91.6	109.92	183.2
	3/16"	.188	6.870	137.4	164.88	274.8
	1/4"	.250	8.810	176.2	211.44	352.4
4 x 3	3/16"	.188	8.150	163	195.6	326
	1/4"	.250	10.510	210.2	252.24	420.4
	3/8"	.375	14.710	294.2	353.04	588.4

Continued

Rectangle Tube

ASTM Grades A-513 (under 2") & ASTM A-500 Gr. B (2" & Over)

Size and Gauge		Wall Decimal	Wt. Lbs./Ft.	Wt. Lbs./20'	Wt. Lbs./24'	Wt. Lbs./40'
5 x 2	3/16"	.188	8.150	163	195.6	326
	1/4"	.250	10.510	210.2	252.24	420.4
5 x 3	3/16"	.188	9.420	188.4	226.08	376.8
	1/4"	.250	12.210	244.2	293.04	488.4
	3/8"	.375	17.270	345.4	414.48	690.8
5 x 4	1/4"	.250	13.910	278.2	333.84	556.4
6 x 2	11 Ga.	.120	6.220	124.4	149.28	248.8
	3/16"	.188	9.420	188.4	226.08	376.8
	1/4"	.250	12.210	244.2	293.04	488.4
6 x 3	3/16"	.188	10.700	214	256.8	428
	1/4"	.250	13.910	278.2	333.84	556.4
	3/8"	.375	19.820	396.4	475.68	792.8
6 x 4	3/16"	.188	11.970	239.4	287.28	478.8
	1/4"	.250	15.620	312.4	374.88	624.8
	3/8"	.375				
			22.370	447.4	536.88	894.8
7 x 4	1/4"	.250	17.320	346.4	415.68	692.8
	3/8"	.375	24.930	498.6	598.32	997.2
7 x 5	1/4"	.250	14.530	290.6	348.72	581.2
	3/8"	.375	27.480	549.6	659.52	1099.2
8 x 2	3/16"	.188	11.970	239.4	287.28	478.8
	1/4"	.250	15.620	312.4	374.88	624.8
8 x 3	3/16"	.188	13.250	265	318	530
	1/4"	.250	17.320	346.4	415.68	692.8
8 x 4	3/16"	.188	14.530	290.6	348.72	581.2
	1/4"	.250	19.020	380.4	456.48	760.8
	3/8"	.375	27.480	549.6	659.52	1099.2

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	=	.250	3/4	=	.750
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

Inches to Decimal Feet Conversion Chart

	0/8"	1/8"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"
0"	.00	.01	.02	.03	.04	.05	.06	.07
1"	.08	.09	.10	.11	.12	.14	.15	.16
2"	.17	.18	.19	.20	.21	.22	.23	.24
3"	.25	.26	.27	.28	.29	.30	.31	.32
4"	.33	.34	.35	.36	.38	.39	.40	.41
5"	.42	.43	.44	.45	.46	.47	.48	.49
6"	.50	.51	.52	.53	.54	.55	.56	.57
7"	.58	.59	.60	.61	.62	.64	.65	.66
8"	.67	.68	.69	.70	.71	.72	.73	.74
9"	.75	.76	.77	.78	.79	.80	.81	.82
10"	.83	.84	.85	.86	.88	.89	.90	.91
11"	.92	.93	.94	.95	.96	.97	.98	.99

Useful Information

CIRCUMFERENCE OF A CIRCLE	=	Diameter x 3.1416
DIAMETER OF A CIRCLE	=	Circumference x 0.31931
AREA OF A CIRCLE	=	Square of Diameter x 0.7854
AREA OF A RECTANGLE	=	Length x Width
AREA OF AN ELLIPSE	=	Product of Both Diameters x 0.7854
AREA OF A PARALLELOGRAM	=	Base 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 CONE	=	Area 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 if 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 pipe increases its capacity four times.

A side of a square multiplied by 1.4142 equals the diameter of its circumscribing circle.

Volume of a cylinder is 3.14 x radius squared x height.

Metric Conversion Factors

English to Metric

pounds	÷	2.2046	=	kilograms
tons	x	907.2	=	kilograms
inches	÷	0.03937	=	millimeters
inches	x	25.4	=	millimeters
inches	x	39.37	=	meters
feet	÷	3.281	=	meters
yards	÷	1.094	=	meters
sq. inches	÷	0.00155	=	sq. millimeters
sq. inches	x	645.16	=	sq. millimeters

English and Metric Equivalents

Weights

1 pound	=	453.6 grams, or 0.4536 kilograms
1 lb. per foot	=	1.4882 kilograms per meter
1 net ton (2000 lbs.)	=	907.18 kilograms
1 gross ton (2240 lbs.)	=	1016 kilograms or 1.0160 metric tons
1 ounce per sq. ft.	=	305.15 grams or 0.30515 kilograms per sq.
1 kilogram	=	2.2046 lbs
1 kilogram per meter	=	0.67197 lbs. per foot
	=	2204.6 lbs
1 metric ton (1000 kg)	=	1.10231 net tons
	=	0.98421 gross ton

Measures

1 inch (in.)	=	25.40 millimeters (mm)
1 sq. inch	=	645.16 square millimeters
1 sq. foot	=	0.092903 square meter
1 millimeter	=	0.03937 inch
1 sq. millimeter	=	0.00155 sq. inch
1 meter	=	3.2808 feet
	=	1.09361 yards
1 sq. meter	=	10.7639 sq. feet
	=	1.196 sq. yards