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WIDE FLANGE (W) ASTM A-36, A-572 GR. 50

Size	Weight Per Ft.	Depth of Section	Flange		Web	Estimated Weight (Lbs.) Stock Lengths		
			Width	Thickness	Thickness	Size	Size	Size
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'
4 x	13	4 1/8	4	3/8	1/4	520	650	780
5 x	16	5	5	3/8	1/4	640		
	19	5 1/8	5	7/16	1/4	760		
6 x	9	5 7/8	4	3/16	3/16	360	450	540
	12	6	4	1/4	1/4	480	600	720
	16	6 1/4	4	3/8	1/4	640	800	960
	15	6	6	1/4	1/4	600	750	900
	20	6 1/4	6	3/8	1/4	800	1000	1200
	25	6 3/8	6 1/8	7/16	5/16	1000	1250	1500
8 x	10	7 7/8	4	3/16	3/16	400	500	600
	13	8	4	1/4	1/4	520	650	780
	15	8 1/8	4	5/16	1/4	600	750	900
	18	8 1/8	5 1/4	5/16	1/4	720	900	1080
	21	8 1/4	5 1/4	3/8	1/4	840	1050	1260
	24	7 7/8	6 1/2	3/8	1/4	960	1200	1440
	28	8	6 1/2	7/16	5/16	1120	1400	1680
	31	8	8	7/16	5/16	1240	1550	1860
	35	8 1/8	8	1/2	5/16	1400	1750	2100
	40	8 1/4	8 1/8	9/16	3/8	1600	2000	2400
48	8 1/2	8 1/8	11/16	3/8	1920	2400	2880	
58	8 3/4	8 1/4	13/16	1/2	2320	2900	3480	
67	9	8 1/4	15/16	9/16	2680	3350	4020	
10 x	12	9 7/8	4	3/16	3/16	480	600	720
	15	10	4	1/4	1/4	600	750	900
	17	10 1/8	4	5/16	1/4	680	850	1020
	19	10 1/4	4	3/8	1/4	760	950	1140
	22	10 1/8	5 3/4	3/8	1/4	880	1100	1320
	26	10 3/8	5 3/4	7/16	1/4	1040	1300	1560
	30	10 1/2	5 3/4	1/2	5/16	1200	1500	1800
	33	9 3/4	8	7/16	5/16	1320	1650	1980
	39	9 7/8	8	1/2	5/16	1560	1950	2340
	45	10 1/8	8	5/8	3/8	1800	2250	2700
	49	10	10	9/16	5/16	1960	2450	2940
	54	10 1/8	10	5/8	3/8	2160	2700	3240
	60	10 1/4	10 1/8	11/16	7/16	2400	3000	3600
	68	10 3/8	10 1/8	3/4	1/2	2720	3400	4080
77	10 5/8	10 1/4	7/8	1/2	3080	3850	4620	
88	10 7/8	10 1/4	1	5/8	3620	4400	5280	
100	11 1/8	10 3/8	1 1/8	11/16	4000	5000	6000	
112	11 3/8	10 3/8	1 1/4	3/4	4480	5600	6720	



WIDE FLANGE (W) ASTM A-36, A-572 GR. 50

Size	Weight Per Ft.	Depth of Section	Flange		Web	Estimated Weight (Lbs.) Stock Lengths		
			Width	Thickness	Thickness	Size	Size	Size
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'
12 x	14	11 7/8	4	1/4	3/16	560	700	840
	16	12	4	1/4	1/4	640	800	960
	19	12 1/8	4	3/8	1/4	760	950	1140
	22	12 1/4	4	7/16	1/4	880	1100	1320
	26	12 1/4	6 1/2	3/8	1/4	1040	1300	1560
	30	12 3/8	6 1/2	7/16	1/4	1200	1500	1800
	35	12 1/2	6 1/2	1/2	5/16	1400	1750	2100
	40	12	8	1/2	5/16	1600	2000	2400
	45	12	8	9/16	5/16	1800	2250	2700
	50	12 1/4	8 1/8	5/8	3/8	2000	2500	3000
	53	12	10	9/16	3/8	2120	2650	3180
	58	12 1/4	10	5/8	3/8	2320	2900	3480
	65	12 1/8	12	5/8	3/8	2600	2900	3480
	72	12 1/4	12	11/16	7/16	2880	3600	4320
	79	12 3/8	12 1/8	3/4	1/2	3160	3950	4740
	87	12 1/2	12 1/8	13/16	1/2	3480	4350	5220
	96	12 3/4	12 1/8	7/8	9/16	3840	4800	5760
	106	12 7/8	12 1/4	1	5/8	4240	5300	6360
	120	13 1/8	12 3/8	1 1/8	11/16	4800	6000	7200
	136	13 3/8	12 3/8	1 1/4	13/16	5440	6800	8160
	152	13 3/4	12 1/2	1 3/8	7/8	6080	7600	9120
	170	14	12 5/8	1 9/16	15/16	6800	8500	1020
	190	14	12 5/8	1 3/4	1 1/16	7600	9500	11400
14 x	22	13 3/4	5	5/16	1/4	880	1100	1320
	26	13 7/8	5	7/16	1/4	1040	1300	1560
	30	13 7/8	6 3/4	3/8	1/4	1200	1500	1800
	34	14	6 3/4	7/16	5/16	1360	1700	2040
	38	14 1/8	6 3/4	1/2	5/16	1520	1900	2280
	43	13 5/8	8	1/2	5/16	1720	2150	2580
	48	13 3/4	8	5/8	5/16	1920	2400	2880
	53	13 7/8	8	11/16	3/8	2120	2650	3180
	61	13 7/8	10	5/8	3/8	2440	3050	3660
	68	14	10	3/4	7/16	2720	3400	4080
	74	14 1/8	10 1/8	13/16	7/16	2960	3700	4440
	82	14 1/4	10 1/8	7/8	1/2	3280	4100	4920
	90	14	14 1/2	11/16	7/16	3600	4500	5400
	99	14 1/8	14 5/8	3/4	1/2	3960	4950	5940
	109	14 3/8	14 5/8	7/8	1/2	4360	5450	6540
	120	14 1/2	14 5/8	15/16	9/16	4800	6000	7200
	132	14 5/8	14 3/4	1	5/8	5280	6600	7920



WIDE FLANGE (W) ASTM A-36, A-572 GR. 50

Size	Weight Per Ft.	Depth of Section	Flange		Web	Estimated Weight (Lbs.) Stock Lengths		
			Width	Thickness	Thickness	Size	Size	Size
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'
14 x	145	14 3/4	15 1/2	1 1/16	11/16	5800	7250	8700
	159	15	15 5/8	1 3/16	3/4	6360	7950	9540
	176	15 1/4	15 5/8	1 5/16	13/16	7040	8800	1056
	193	15 1/2	15 3/4	1 7/16	7/8	7720	9650	11580
	211	15 3/4	15 3/4	1 9/16	1	8440	10550	12660
	233	16	15 7/8	1 3/4	1 1/16	9320	11650	13980
	257	16 3/4	16	1 7/8	1 3/16	10280	12850	1542
	283	16 3/4	16 1/8	2 1/16	1 5/16	11320	14150	1698
	311	17 1/8	16 1/4	2 1/4	1 7/16	12440	15550	18660
	342	17 1/2	16 3/8	2 1/2	1 9/16	13680	17100	20520
	370	17 7/8	16 1/2	2 5/8	1 5/8	14800	18500	22200
	398	18 1/4	16 5/8	2 7/8	1 3/4	15920	19900	23880
	426	18 5/8	16 3/4	3 1/16	1 7/8	17040	21300	25560
	16 x	26	15 3/4	5 1/2	3/8	1/4	1040	1300
31		15 7/8	5 1/2	7/16	1/4	1240	1550	1860
36		15 7/8	7	7/16	5/16	1440	1800	2160
40		16	7	1/2	5/16	1600	2000	2400
45		16 1/8	7	9/16	3/8	1800	2250	2700
50		16 1/4	7 1/8	5/8	3/8	2000	2500	3000
57		16 3/8	7 1/8	11/16	7/16	2280	2850	3420
67		16 3/8	10 1/4	11/16	3/8	2680	3350	4020
77		16 1/2	10 1/4	3/4	7/16	3080	3850	4620
89		16 3/4	10 3/8	7/8	1/2	3560	4450	5340
100		17	10 3/8	1	9/16	4000	5000	6000
18 x	35	17 3/4	6	7/16	5/16	1400	1750	2100
	40	17 7/8	6	1/2	5/16	1600	2000	2400
	46	18	6	5/8	3/8	1840	2300	2760
	50	18	7 1/2	9/16	3/8	2000	2500	3000
	55	18 1/8	7 1/2	5/8	3/8	2200	2750	3300
	60	18 1/4	7 1/2	11/16	7/16	2400	3000	3600
	65	18 3/8	7 5/8	3/4	7/16	2600	3250	3900
	71	18 1/2	7 5/8	13/16	1/2	2480	3550	4260
	76	18 1/4	11	11/16	7/16	3040	3800	4560
	86	18 3/8	11 1/8	3/4	1/2	3440	4300	5160
	97	18 5/8	11 1/8	7/8	9/16	3880	4850	5820
	106	18 3/4	11 1/4	15/16	9/16	4240	5300	6360
	119	19	11 1/4	1 1/16	5/8	4760	5950	7140
21 x	130	19 1/4	11 1/8	1 3/16	11/16	5200	6500	7800
	44	20 5/8	6 1/2	7/16	3/8	1760	2200	2640a
	50	20 7/8	6 1/2	9/16	3/8	2000	2500	3000



WIDE FLANGE (W) ASTM A-36, A-572 GR. 50

Size	Weight Per Ft.	Depth of Section	Flange		Web	Estimated Weight (Lbs.) Stock Lengths			
			Width	Thickness	Thickness	Size	Size	Size	
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'	
21 x	57	21	6 1/2	5/8	3/8	2280	2850	3420	
	62	21	8 1/4	5/8	3/8	2480	3100	3720	
	68	21 1/8	8 1/4	11/16	7/16	2720	3400	4080	
	73	21 1/4	8 1/4	3/4	7/16	2920	3650	4380	
	83	21 3/8	8 3/8	13/16	1/2	3320	4150	4980	
	93	21 5/8	8 3/8	15/16	9/16	3720	4650	5580	
	101	21 3/8	12 1/4	13/16	1/2	4040	5050	6060	
	111	21 1/2	12 3/8	7/8	9/16	4440	5550	6660	
	122	21 5/8	12 3/8	15/16	5/8	4880	6100	7320	
	132	21 7/8	12 1/2	1 1/16	5/8	5280	6600	7920	
	147	22	12 1/2	1 1/8	3/4	5880	7350	8820	
	24 x	55	23 5/8	7	1/2	3/8	2200	2750	3300
		62	23 3/4	7	9/16	7/16	2480	3100	3720
		68	23 3/4	9	9/16	7/16	2720	3400	4080
76		23 7/8	9	11/16	7/16	3040	3800	4560	
84		24 1/8	9	3/4	1/2	3360	4200	5040	
94		24 1/4	9 1/8	7/8	1/2	3760	4700	5640	
104		24	12 3/4	3/4	1/2	4160	5200	6240	
117		24 1/4	12 3/4	7/8	9/16	4680	5850	7020	
131		24 1/2	12 7/8	15/16	5/8	5240	6550	7860	
146		24 3/4	12 7/8	1 1/16	5/8	5840	7300	8760	
162		25	13	1 1/4	11/16	6480	8100	9720	
27 x	84	26 3/4	10	5/8	7/16	3360	4200	5040	
	94	26 7/8	10	3/4	1/2	3760	4700	5640	
	102	27 1/8	10	13/16	1/2	4080	5100	6120	
	114	27 1/4	10 1/8	15/16	9/16	4560	5700	6840	
	146	27 3/8	14	1	5/8	5840	7300	8760	
	161	27 5/8	14	1 1/16	11/16	6440	8050	9660	
	178	27 3/4	14 1/8	1 3/16	3/4	7120	8900	10680	
30 x	90	29 1/2	10 3/8	9/16	1/2	3600	4500	5400	
	99	29 5/8	10 1/2	11/16	1/2	3960	4950	5940	
	108	29 7/8	10 1/2	3/4	9/16	4320	5400	6480	
	116	30	10 1/2	7/8	9/16	4640	5800	6960	
	124	30 1/8	10 1/2	15/16	9/16	4960	6200	7440	
	132	30 1/4	10 1/2	1	5/8	5280	6600	7920	
	148	30 5/8	10 1/2	1	5/8	5920	7400	8880	
	173	30 1/2	15	1 1/16	5/8	6920	8650	10380	
	191	30 5/8	15	1 3/16	11/16	7640	9550	11460	
	211	31	15 1/8	1 5/16	3/4	8440	10550	12660	
235	31 1/4	15	1 1/2	13/16	9400	11750	14100		



WIDE FLANGE (W) ASTM A-36, A-572 GR. 50

Size	Weight Per Ft.	Depth of Section	Flange		Web	Size	Size	Size
			Width	Thickness	Thickness			
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'
33 x	118	32 7/8	11 1/2	3/4	9/16	4720	5900	7080
	130	33 1/8	11 1/2	7/8	9/16	5200	6500	7800
	141	33 1/4	11 1/2	15/16	5/8	5640	7050	8460
	152	33 1/2	11 5/8	1 1/16	5/8	6080	7600	9120
	169	33 7/8	11 1/2	1 1/4	1 1/16	6760		
	201	33 5/8	15 3/4	1 1/8	11/16	8040	10050	12060
	221	33 7/8	15 3/4	1 1/4	3/4	8840	11050	13260
	241	34 1/8	15 7/8	1 3/8	13/16	9640	12050	14460
	263	34 1/2	15 3/4	1 9/16	7/8	10520		
	36 x	135	35 1/2	12	13/16	5/8	5400	6750
150		35 7/8	12	15/16	5/8	6000	7500	9000
160		36	12	1	5/8	6400	8000	9600
170		36 1/8	12	1 1/8	11/16	6800	8500	10200
182		36 3/8	12 1/8	1 3/16	3/4	7280	9100	10920
194		36 1/2	12 1/8	1 1/4	3/4	7760	9700	11640
210		36 3/4	12 1/8	1 3/8	13/16	8400	10500	12600
230		35 7/8	16 1/2	1 1/4	3/4	9200	11500	13800
245		36 1/8	16 1/2	1 3/8	13/16	9800	12250	14700
260		36 1/4	16 1/2	1 7/16	13/16	10400	13000	15600
280		36 1/2	16 5/8	1 9/16	7/8	11200	14000	16800
300		36 3/4	16 5/8	1 11/16	15/16	12000	15000	18000
359		37 3/8	16 3/4	2	1 1/8	14360	17950	21540



JR. BEAMS (M) ASTM A-36

Size	Weight Per Ft.	Depth of Section	Flange		Web	Estimated Weight Lbs. Stocked Lengths
			Width	Thickness	Thickness	
In.	Lbs.	In.	In.	In.	In.	40'
6 x	4.4	6	1 7/8		1/8	176
8 x	6.5	8	2 1/4		1/8	260
10 x	9.0	10	2 3/4		3/16	360
12 x	11.8	12	3		3/16	472

AMERICAN STANDARD SHAPES (S)

ASTM A—36



Size	Weight Per Ft.	Depth of Section	Flange		Web Thickness	Estimated Weight Lbs.		
			Width	Thickness		Stocked Lengths		
In.	Lbs.	In.	In.	In.	In.	40'	50'	60'
3 x	5.7	3	2 3/8	1/4	3/16	228		
	7.5	3	2 1/2	1/4	3/8	300		
4 x	7.7	4	2 5/8	5/16	3/16	308		
	9.5	4	2 3/4	5/16	5/16	380		
5 x	10.0	5	3	5/16	3/16	400		
	14.75	5	3 1/4	5/16	1/2	590		
6 x	12.5	6	3 3/8	3/8	1/4	500	625	750
	17.25	6	3 5/8	3/8	7/16	690	863	1035
7 x	15.3	7	3 5/8	3/8	1/4	612	765	918
	20.0	7	3 7/8	3/8	7/16	800		
8 x	18.4	8	4	7/16	1/4	736	920	1104
	23.0	8	4 1/8	7/16	7/16	920	1150	1380
10 x	25.4	10	4 5/8	1/2	5/16	1016	1270	1524
	35.0	10	5	1/2	5/8	1400	1750	
12 x	31.8	12	5	9/16	3/8	1272	1590	1908
	35.0	12	5 1/8	9/16	7/16	1400	1750	2100
	40.8	12	5 1/4	11/16	7/16	1632	2040	2448
	50.0	12	5 1/2	11/16	11/16	2000	2500	3000
15 x	42.9	15	5 1/2	5/8	7/16	1716	2145	2574
	50.0	15	5.5/8	5/8	9/16	2000	2500	3000
18 x	54.7	18	6	11/16	7/16	2188	2735	3282
	70.0	18	6 1/4	11/16	11/16	2800		
20 x	66.0	20	6 1/4	13/16	1/2	2640	3300	3960
	75.0	20	6 3/8	13/16	5/8	3000		
	86.0	20 1/4	7	15/16	11/16	3440	4300	5160
	96.0	20 1/4	7 1/4	15/16	13/16	3840		
24 x	80.0	24	7	7/8	1/2	3200	4000	4800
	100.0	24	7 1/4	7/8	3/4	4000	5000	6000
	106.0	24 1/2	7 7/8	1 1/8	5/8	4240	5300	6360
	121.0	24 1/2	8	1 1/16	13/16	4840	6050	7260

MISCELLANEOUS CHANNELS (MC)

ASTM A-36

Size	Weight Per Ft.	Depth of Section	Flange		Web Thickness	Estimated Weight Lbs. Stocked Lengths			
			Width	Thickness		20'	40'	50'	60'
In.	Lbs.	In.	In.	In.	In.				
3 x	7.1					142	284		
4 x	13.8					276	552		
6 x	12.0	6	2 1/2	3/8	5/16	240	480		
	15.1	6	2 15/16	7/16	5/16	302	604		
	15.3	6	3 1/2	3/8	5/16	306	612		
	16.3	6	3	7/16	3/8	326	652		
	18.0	6	3 1/2	7/16	3/8	360	720		
7 x	19.1	7	3 1/2	1/2	3/8	382	764		
	22.7	7	3 5/8	1/2	1/2	454	908		
8 x	18.7	8	3	1/2	3/8	374	748	935	1122
	20.0	8	3	1/2	3/8	400	800		
	21.4	8	3 1/2	1/2	3/8	428	856		
	22.8	8	3 1/2	1/2	7/16	456	912		
9 x	23.9	9	3 1/2	9/16	3/8	478	956		
	25.4	9	3 1/2	1/2	7/16	508	1016		
10 x	22.0	10	3 1/2	1/2	5/16	440	880		
	25.0	10	3 1/2	1/2	7/16	500	1000		
	28.5	10	4	9/16	7/16	570	1140		
	33.6	10	4 1/8	9/16	9/16	672	1344		
	41.1	10	4 3/8	9/16	13/16	822	1644		
12 x	31	12	3 5/8	11/16	3/8	620	1240		
	35	12	3 3/4	11/16	7/16	700	1400		
	40.0	12	3 7/8	11/16	9/16	800	1600		
	45.0	12	4	11/16	11/16	900	1800		
12 x	50.0	12	4 1/8	11/16	13/16	1000	2000		
13 x	31.8	13	4	5/8	3/8	636	1272		
	50.0	13	4 3/8	5/8	13/16	1000	2000		
18 x	42.7	18	4	5/8	7/16	854	1708	2135	2562
	45.8	18	4	5/8	1/2	916	1832	2290	2748
	51.9	18	4 1/8	5/8	5/8	1038	2076	2595	3114
	58.0	18	4 1/4	5/8	11/16	1160	2320	2900	3480



AMERICAN STANDARD CHANNELS (C) ASTM A-36

Size	CPIX Weight Per Ft.	Depth of Section	Flange		Web Thickness	Estimated Weight Lbs. Stocked Lengths			
			Width	Thickness		20'	40'	50'	60'
In.	Lbs.	In.	In.	In.	In.				
3 x	4.1	3	1 3/8	1/4	3/16	82	164		
	5.0	3	1 1/2	1/4	1/4	100	200		
	6.0	3	1 5/8	1/4	3/8	120	240		
4 x	5.4	4	1 5/8	5/16	3/16	108	206		
	7.25	4	1 3/4	5/16	5/16	145	290		
5 x	6.7	5	1 3/4	5/16	3/16	134	268	335	402
	9.0	5	1 7/8	5/16	5/16	180	360		
6 x	8.2	6	1 7/8	5/16	3/16	164	328	410	492
	10.5	6	2	5/16	5/16	210	420	525	630
	13.0	6	2 1/8	5/16	7/16	260	520		
7 x	9.8	7	2 1/8	3/8	3/16	196	392	490	588
	12.25	7	2 1/4	3/8	5/16	245	490		
8 x	8.5	8	1 7/8	5/16	3/16	170	340		
	11.5	8	2 1/4	3/8	1/4	230	460	575	690
	13.75	8	2 3/8	3/8	5/16	275	550	688	825
	18.75	8	2 1/2	3/8	1/2	375	750		
9 x	13.4	9	2 3/8	7/16	1/4	268	536	670	804
	15.0	9	2 1/2	7/16	5/16	300	600		
	20.0	9	2 5/8	7/16	7/16	400	800		
10 x	15.3	10	2 5/8	7/16	1/4	306	612	765	918
	20.0	10	2 3/4	7/16	3/8	400	800	1000	1200
	25.0	10	2 7/8	7/16	1/2	500	1000	1250	1500
	30.0	10	3	7/16	11/16	600	1200	1500	1800
12 x	20.7	12	3	1/2	5/16	414	828	1035	1242
	25.0	12	3	1/2	3/8	500	1000	1250	1500
	30.0	12	3 1/8	1/2	1/2	600	1200	1500	1800
15 x	33.9	15	3 3/8	5/8	3/8	678	1356	1695	2034
	40.0	15	3 1/2	5/8	1/2	800	1600	2000	2400
	50.0	15	3 3/4	5/8	11/16	1000	2000	2500	3000

**BAR SIZE CHANNEL
ASTM A-36**

Size				Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths
In.				Lbs.	20'
1	x	1/2	x 1/8	0.82	16.4
1 1/4	x	1/2	x 1/8	1.00	20.0
1 1/2	x	1/2	x 1/8	1.12	22.4
2	x	5/8	x 1/4	2.29	45.9
2	x	1	x 1/8	1.78	35.6
2	x	1	x 3/16	2.32	46.4

**JR. CHANNEL
ASTM A-36**

Size	Weight Per Ft.	Depth of Section	Flange		Web Thickness	Estimated Weight Lbs. Stocked Lengths			
			Width	Thickness		20'	40'	50'	60'
In.	Lbs.	In.	In.	In.	In.				
10 x	6.5	10	1 1/8	3/16	1/8	130	260		
	8.4	10	1 1/2	1/4	3/16	168	336		
12 x	10.6	12	1 1/2	5/16	3/16	212	424		

**BAR SIZE ANGLE (L)
ASTM A-36**

Size	Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths	
In.	Lbs.	20'	40'
1/2 x 1/2 x 1/8	.38	7.6	
3/4 x 3/4 x 1/8	.59	11.8	
1 x 1 x 1/8	.80	16.0	
	3/16	1.16	46.4
	1/4	1.49	59.6
1 1/4 x 1 1/4 x 1/8	1.01	20.2	
	3/16	1.48	29.6
	1/4	1.92	38.4
1 1/2 x 1 1/2 x 1/8	1.23	24.6	
	3/16	1.80	36.0
	1/4	2.34	46.8
1 3/4 x 1 3/4 x 1/8	1.44	28.8	
	3/16	2.12	42.4
	1/4	2.77	55.4
2 x 1 1/2 x 1/8	1.44	28.8	
	3/16	2.12	42.4
	1/4	2.77	55.4
			84.8
			110.8

BAR SIZE ANGLE (L)
ASTM A-36

Size	Wt. Per Ft.	Estimated Weight Lbs.	
		Stocked Lengths	
In.	Lbs.	20'	40'
2 x 2 x 1/8	1.65	33.0	66.0
3/16	2.44	48.8	97.6
1/4	3.19	63.8	127.6
3/8	4.70	94.0	188.0
2 1/2 x 2 x 3/16	2.75	55.0	110.0
1/4	3.62	72.4	144.8
3/8	5.30	106.0	212.0
2 1/2 x 2 1/2 x 3/16	3.07	61.4	122.8
1/4	4.10	82.0	164.0
5/16	5.00	100.0	200.0
3/8	5.90	118.0	236.0
2 x 2 x 5/16	3.92	78.4	
3 x 2 x 3/16	3.07	61.4	123
1/4	4.1	82	164
5/16	5.0	100	200
3/8	5.9	118	236
3 x 2 1/2 x 3/16	3.39	67.8	136
1/4	4.5	90	180
5/16	5.6	112	224
3/8	6.6	132	264
3 x 3 x 3/16	3.71	74	148
1/4	4.9	98	196
5/16	6.1	122	244
3/8	7.2	144	288
1/2	9.4	188	376
3 1/2 x 2 1/2 x 1/4	4.9	98	196
5/16	6.1	122	244
3/8	7.2	144	288
1/2	9.4	188	376
3 1/2 x 3 x 1/4	5.4	108	216
5/16	6.6	132	264
3/8	7.9	158	316
1/2	10.2	204	408
3 1/2 x 3 1/2 x 1/4	5.8	116	232
5/16	7.2	144	288
3/8	8.5	170	340
1/2	11.1	222	444
4 x 3 x 1/4	5.8	116	232
5/16	7.2	144	288
3/8	8.5	170	340
1/2	11.1	222	444

STRUCTURAL ANGLE (L)
ASTM A-36

Size	Wt. Per Ft.	Estimated Weight Lbs.	
		Stocked Lengths	
In.	Lbs.	20'	40'
4 x 3 1/2 x 1/4	6.2	124	248
5/16	7.7	154	308
3/8	9.1	182	364
1/2	11.9	238	476
4 x 4 x 1/4	6.6	132	264
5/16	8.2	164	328
3/8	9.8	196	392
1/2	12.8	256	512
5/8	15.7	314	628
3/4	18.5	370	740
5 x 3 x 1/4	6.6	132	264
5/16	8.2	164	328
3/8	9.8	196	392
1/2	12.8	256	512
5 x 3 1/2 x 1/4	7.0	140	280
5/16	8.7	174	348
3/8	10.4	208	416
1/2	13.6	272	544
3/4	19.8	396	792
5 x 5 x 5/16	10.3	206	412
3/8	12.3	246	492
1/2	16.2	324	648
5/8	20.0	400	800
3/4	23.6	472	944
7/8	27.2	544	1088
6 x 3 1/2 x 1/4	7.9	158	316
5/16	98	196	392
3/8	11.7	234	468
1/2	15.3	306	612
6 x 4 x 5/16	10.3	206	412
3/8	12.3	246	492
1/2	16.2	324	648
5/8	20.0	400	800
3/4	23.6	472	944
6 x 6 5/16	12.4	248	496
3/8	14.9	298	596
1/2	19.6	392	784
5/8	24.2	484	968
3/4	28.7	574	1148
1	37.4	748	1496
7 x 4 x 3/8	13.6	272	544
1/2	17.9	358	716

STRUCTURAL ANGLE (L)
ASTM A-36

Size	Wt. Per Ft.	Estimated Weight Lbs.	
		Stocked Lengths	
In.	Lbs.	20'	40'
3/4	26.2	524	1048
8 x 4 x 1/2	19.6	392	784
3/4	28.7	574	1148
1	37.4	748	1496
8 x 6 x 1/2	23.0	460	920
3/4	33.8	676	1352
1	44.2	884	1768
8 x 8 x 1/2	26.4	528	1056
5/8	32.7	654	1308
3/4	38.9	778	1556
1	51.0	1020	2040

FLATS
ASTM A-36

Size	Wt. Per Ft.	Estimated Weight Lbs.	
		Stocked Lengths	
In.	Lbs.	20'	
1/4 x 1/2	.425	8.5	
3/4	.6375	12.75	
1	.85	17.00	
1 1/4	1.0625	21.25	
1 1/2	1.275	25.5	
1 3/4	1.488	29.76	
2	1.7	34.00	
2 1/4	1.913	38.26	
2 1/2	2.125	42.5	
3	2.55	51.00	
3 1/2	2.975	59.5	
4	3.4	68.00	
4 1/2	3.825	76.5	
5	4.25	85.00	
5 1/2	4.675	93.5	
6	5.1	102.00	
7	5.95	119.00	
8	6.8	136.00	
5/16 x 1	1.0625	21.25	
1 1/2	1.594	31.88	
2	2.125	42.5	

**FLATS
ASTM A-36**

Size		Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths
In.		Lbs.	20'
	2 1/2	2.656	53.12
	3	3.188	63.76
	3 1/2	3.719	74.38
	4	4.25	85.00
	5	5.313	106.26
	6	6.375	127.5
	7	7.4	148.8
	8	8.5	170.00
3/8	x 3/4	.9563	19.13
	1	1.275	25.5
	1 1/4	1.5938	31.88
	1 1/2	1.913	38.26
	1 3/4	2.231	44.62
	2	2.55	51.00
	2 1/2	3.188	63.76
	3	3.825	76.5
	3 1/2	4.463	89.26
	4	5.1	102.00
	4 1/2	5.738	114.76
	5	6.375	127.5
	5 1/2	7.013	140.26
	6	7.65	153.00
	7	8.93	178.6
	8	10.2	204.00
1/2	x 3/4	1.275	25.5
	1	1.7	34.00
	1 1/4	2.125	42.5
	1 1/2	2.55	51.00
	1 3/4	2.975	59.5
	2	3.4	68.00
	2 1/2	4.25	85.00
	3	5.1	102.00
	3 1/2	5.95	119.5
	4	6.8	136.00
	4 1/2	7.65	153.00
	5	8.5	170.00
	5 1/2	9.35	187.00
	6	10.2	204.00
	7	11.9	238.00
	8	13.6	272.00

FLATS
ASTM A-36

Size		Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths
In.		Lbs.	20'
5/8	x	1	42.5
		1 1/4	53.12
		1 1/2	63.76
		2	85.00
		2 1/2	106.26
		3	127.5
		3 1/2	148.76
		4	170.00
		4 1/2	191.26
		5	212.5
		5 1/2	233.76
		6	255.00
		7	297.6
		8	340.00
		3/4	x
1 1/4	42.5		
1 1/2	76.5		
1 3/4	89.26		
2	102.00		
2 1/2	127.5		
3	153.00		
3 1/2	178.5		
4	204.00		
4 1/2	229.5		
5	255.00		
5 1/2	280.5		
6	306.00		
7	357.00		
8	408.00		
7/8	x	1	59.5
		1 1/2	89.26
		2	119.00
		2 1/2	148.76
		3	178.5
		3 1/2	208.26
		4	238.00
		4 1/2	267.76
		5	297.5
		5 1/2	327.26
		6	357.00

FLATS
ASTM A-36

Size		Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths
In.		Lbs.	20'
1	x	7	436.6
		8	476.00
		1 1/2	102.00
		2	136.00
		2 1/2	170.00
		3	204.00
		3 1/2	238.00
		4	272.00
		4 1/2	306.00
		5	340.00
		5 1/2	374.00
		6	408.00
		7	476.00
		8	544.00
1 1/4	x	2	170.00
		2 1/2	212.6
		3	255.00
		4	340.00
		5	425.00
		6	510.00
		7	595.00
		8	680.00
1 1/2	x	2	204.00
		2 1/2	255.00
		3	306.00
		4	408.00
		5	510.00
		6	612.00
		7	714.00
		8	816.00
2	x	3	408.00
		4	544.00
		5	680.00
		6	816.00
		7	952.00
		8	1088.00

HOT ROLLED STRIP

Size		Wt. Per Ft.	Estimated Weight Lbs. Stocked Lengths
In.		Lbs.	20'
1/8	x	1/2	4.26
		3/4	6.38
		1	8.50
		1 1/4	10.62
		1 1/2	12.76
		1 3/4	14.88
		2	17.00
		2 1/2	21.26
		3	25.5
		3 1/2	29.76
		4	34.00
		5	42.50
		6	51.00
		8	68.00
3/16	x	1/2	6.38
		3/4	9.56
		1	12.76
		1 1/4	15.94
		1 1/2	19.12
		2	25.50
		2 1/2	31.88
		3	38.26
		3 1/2	44.62
		4	51.00
		5	63.76
		6	76.50
		7	89.20
		8	102.00

WEIGHTS OF ROUND, SQUARE AND HEXAGON BARS
Hot Rolled & Cold Rolled Pounds Per Foot

Size, Inches	Rounds	Squares	Hexagons	Wt./20' Bar Rounds Only*
1/16	0.0104	0.0133	0.0115	
1/8	0.0417	0.0531	0.0460	
3/16	0.0939	0.1195	0.1035	1.88
1/4	0.1669	0.2125	0.1840	3.34
5/16	0.2608	0.3320	0.2875	5.22
3/8	0.3755	0.4781	0.4141	7.52
7/16	0.5111	0.6508	0.5636	10.22
1/2	0.6676	0.8500	0.7361	13.36
9/16	0.8449	1.0760	0.9316	16.90
5/8	1.0430	1.3280	1.1500	20.80
11/16	1.2620	1.6070	1.3920	25.20
3/4	1.5020	1.9130	1.6560	30.00
13/16	1.7630	2.2450	2.9440	35.20
7/8	2.0450	2.6030	2.2540	40.90
15/16	2.347	2.988	2.588	47.0
1	2.670	3.400	2.945	53.4
1 1/16	3.015	3.838	3.324	60.2
1 1/8	3.38	4.303	3.727	67.6
1 3/16	3.766	4.795	4.152	75.4
1 1/4	4.172	5.313	4.601	83.4
1 5/16	4.6	5.857	5.072	92.0
1 3/8	5.049	6.428	5.567	101.0
1 7/16	5.518	7.026	6.085	110.4
1 1/2	6.008	7.650	6.625	120.2
1 9/16	6.519	8.301	7.189	
1 5/8	7.051	8.978	7.775	141.0
1 11/16	7.604	9.682	8.385	
1 3/4	8.178	10.41	9.018	163.6
1 13/16	8.773	11.17	9.673	
1 7/8	9.388	11.95	10.35	187.8
1 15/16	10.02	12.76	11.05	
2	10.68	13.6	11.78	213.6
2 1/16	11.36	14.46	12.53	
2 1/8	12.06	15.35	13.3	241.2
2 3/16	12.78	16.27	14.09	
2 1/4	13.52	17.21	14.91	270.4
2 5/16	14.28	18.18	15.75	

WEIGHTS OF ROUND, SQUARE AND HEXAGON BARS
Hot Rolled & Cold Rolled Pounds Per Foot

Size, Inches	Rounds	Squares	Hexagons	Wt./20' Bar Rounds Only*
2 3/8	15.06	19.18	16.61	301.2
2 7/16	15.87	20.2	17.49	
2 1/2	16.69	21.25	18.4	333.8
2 5/8	18.4	23.43	20.29	368
2 3/4	20.19	25.71	22.27	403.9
2 7/8	22.07	28.1	24.34	441.4
3	24.03	30.6	26.5	480.6
3 1/8	26.08	33.2	28.76	521.6
3 1/4	28.21	35.91	31.2	564.2
3 3/8	30.42	38.73	33.54	608.4
3 1/2	32.71	41.65	36.07	654.2
3 5/8	35.09	44.68	38.69	701.8
3 3/4	37.55	47.81	41.41	751
3 7/8	40.1	51.05	44.21	802
4	42.73	54.4	47.11	854.6
4 1/8	45.44	57.85	50.1	908.8
4 1/4	48.23	61.41	53.18	964.6
4 3/8	51.11	65.08	56.36	1022.2
4 1/2	54.08	68.85	59.63	1081.6
4 5/8	57.12	72.73	62.98	1143.4
4 3/4	60.25	76.71	66.44	1205
4 7/8	63.46	80.8	69.98	1269.2
5	66.76	85	73.61	1335.2
5 1/8	70.14	89.3	77.34	1402.8
5 1/4	73.6	93.71	81.16	1472
5 3/8	77.15	98.23	85.07	1543
5 1/2	80.78	102.85	89.07	1615.6
5 5/8	84.49	107.58	93.16	1689.8
5 3/4	88.29	112.41	97.35	1765.8
5 7/8	92.17	117.35	101.63	1843.4
6	96.13	122.4	106	1922.6

HOT ROLLED ROUNDS
MERCHANT BAR AND SPECIAL BAR QUALITY
M1020 A36 C1018 C1045

Size	Wt. per Ft. in Lbs.	Wt. per 20 Ft. Bar
6 1/8	100.18	2003.6
6 1/4	104.31	2086.2
6 1/2	112.82	2256.4
6 3/4	121.67	2433.4
7	130.85	2617
7 1/4	140.36	2807.2
7 1/2	150.21	3004.2
7 3/4	160.39	3207.8
8	170.9	3418
8 1/4	181.75	3635
8 1/2	192.93	3858.6
8 3/4	204.45	4089
9	216.3	4326
9 1/2	241	4820
10	267.04	5340.8
10 1/2	294.4	5888
11	323.1	6462

SQUARE STRUCTURAL STEEL TUBING ASTM A-500 GR A&B

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
1/2 x 1/2	.063	.384		9.216	
3/4 x 3/4	.063	.605	12.10	14.52	
1 x 1	.063	.827	16.54	19.85	
	.072	.908		21.79	
	.078	.96	19.20	23.04	
	.083	1.04	20.80	24.96	
	.120	1.44	28.80	34.56	
1 1/4 x 1 1/4	.063	1.047		25.13	
	.078	1.23		29.52	
	.083	1.32		31.68	
	.120	1.84	36.80	44.16	
1 1/2 x 1 1/2	.063	1.268	25.36	30.43	
	.072	1.38		33.12	
	.078	1.49		35.76	
	.083	1.60		38.40	
	.120	2.25	45.00	54.00	
	.1875	3.04	60.80	72.96	121.60
	.250	3.70	74.00	88.80	148.00
2 x 2	.063	1.71	34.20	41.04	
	.078	2.02		48.48	
	.083	2.10	42.00	50.40	
	.120	3.06	61.00	73.20	122.00
	.1875	4.32	86.00	104.00	173.00
	.250	5.41	108.20	129.84	216.40
2 1/2 x 2 1/2	.120	3.90	78.00	93.60	156.00
	.1875	5.59	112	134.16	224.00
	.250	7.11	142.20	170.64	284.40
3 x 3	.078	3.06			122.36
	.083	3.23			129.20
	.120	4.75	95.00	114.00	190.00
	.1875	6.87	137.00	165.00	275.00
	.250	8.81	176.20	211.44	352.40
	.3125	10.58	212.00		423.00
.375	13.01	260.20		520.40	

Various Sizes Available in 48' and 60'.

SQUARE STRUCTURAL STEEL TUBING
ASTM A-500 GR A&B

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
3 1/2 x 3 1/2	.120	5.61	112.20		224.40
	.1875	8.15	163.00	195.60	326.00
	.250	10.51	210.20	252.24	420.40
	.3125	12.70			508.00
4 x 4	.120	6.45	129.00	154.80	258.00
	.1875	9.42	188.00	226.00	377.00
	.250	12.21	244.20	293.04	488.40
	.3125	14.83	296.60	355.92	593.20
	.375	17.27	345.40	414.48	690.80
5 x 5	.500	21.63	432.60	519.12	865.20
	.1875	11.97	239.00	287.28	479.00
	.250	15.62	312.40	374.88	624.80
	.3215	19.08	381.60	457.92	763.20
	.375	22.37	447.40	536.88	894.80
6 x 6	.500	28.43	568.60	682.32	1137.20
	.1875	14.53	291.00	348.72	581.00
	.250	19.02	380.40	456.48	760.80
	.3125	23.34	466.80	560.16	933.60
	.375	27.48	549.60	659.52	1099.20
7 x 7	.500	35.24	704.80	845.76	1409.60
	.1875	17.08			683.20
	.250	22.42	448.40	538.08	896.80
	.3125	27.59	551.80	662.16	1103.60
	.375	32.58	651.60		1303.20
8 x 8	.500	42.05	841.00	1009.20	1682.00
	.1875	19.63	393.00	471.12	785.00
	.250	25.82	516.40	619.68	1032.80
	.3125	31.84	637.00	764.00	1274.00
	.375	37.69	753.80	904.56	1507.60
10 x 10	.500	48.85	977.00	1172.40	1954.00
	.1875	24.73	494.60		989.20
	.250	32.63	652.60	783.12	1305.20
	.3125	40.35	807.00		1614.00
	.375	47.90	958.00	1149.60	1916.00
	.500	62.46	1249.20		2498.40
	.625	76.33			3053.20

Various Sizes Available in 48' and 60'.

**SQUARE STRUCTURAL STEEL TUBING
ASTM A-500 GR A&B**

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
12 x 12	.250	39.43	788.60		1577.20
	.3125	48.86	977.20		1954.40
	.375	58.10			2324.00
	.500	76.07	1521.40		3042.80
	.625	93.35			3734.00
14 x 14	.3125	57.36			2294.40
	.375	68.31			2732.40
	.500	89.68			3587.20
16 x 16	.3125	65.87			2634.80
	.375	78.52			3140.80
	.500	103.30			4132.00

RECTANGULAR STRUCTURAL STEEL TUBING ASTM A-500 GR A&B

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
2 x 1	.063	1.268		30.43	
	.078	1.49		35.76	
	.120	2.252		54.05	
3 x 1	.078	2.02	40.40	48.48	
	.120	3.068	61.36	73.63	
3 x 2	.120	3.90	78.00	93.60	156.00
	.1875	5.59	111.80	134.16	224.00
	.250	7.11	142.20	170.64	284.40
4 x 2	.078	3.06		73.42	
	.083	3.293		79.03	
	.120	4.75	95.00	114.00	190.00
	.1875	6.87	137.40	159.00	275.00
	.250	8.80	176.00	211.20	352.00
4 x 3	.3125	10.58	211.60		423.20
	.1875	8.15	163.00	195.60	326.00
	.250	10.51	210.20	252.24	420.40
	.3125	12.70	254.00		508.00
	5 x 2	.1875	8.15	163.00	
.250		10.51	210.20		420.40
5 x 3	.1875	9.42	188.40		376.80
	.250	12.21	244.20	293.04	488.40
	.3125	14.83			593.20
	.375	17.27	345.40		691.00
	.500	21.63	432.60		865.20
5 x 4	.250	13.91			556.40
6 x 2	.1875	9.42	188.40		376.80
	.250	12.21	244.20	293.04	488.40
	.3125	14.83	296.60		593.20
	.375	17.27	345.40		690.80
6 x 3	.1875	10.70	214.00		428.00
	.250	13.91	278.20		556.40
	.3125	16.96			678.40
	.375	19.82	396.40		792.80
	.500	25.03	500.60		1001.20
6 x 4	.1875	11.97	239.40		479.00
	.250	15.62	312.40	374.88	624.00

Various Sizes Available in 48' and 60'.

RECTANGULAR STRUCTURAL STEEL TUBING ASTM A-500 GR A&B

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
6 x 4	.3215	19.08	381.50		763.00
	.375	22.37	447.40		894.80
	.500	28.43	568.60		1137.00
7 x 4	.250	17.32	346.40		692.80
	.375	24.93	498.60		997.00
7 x 5	.250	19.02	380.40		760.80
	.3125	23.34	466.80		933.60
	.375	27.48	549.60	659.52	1099.00
	.500	35.24	704.80	845.76	1409.60
8 x 2	.1875	11.97	239.40		478.80
	.250	15.62	312.40		625.00
	.3125	19.08	381.60		763.20
	.375	22.37	447.40	536.88	894.80
8 x 3	.1875	13.25	265.00	318.00	530.00
	.250	17.32	346.40		692.80
	.375	24.93	498.60		997.20
	.500	31.84	636.80		1273.60
8 x 4	.1875	14.53	290.60	348.72	581.20
	.250	19.02	380.42	456.48	760.80
	.3125	23.34	446.80	560.16	933.60
	.375	27.48	549.60	659.52	1099.20
	.500	35.24	704.80		1409.60
8 x 6	.1875	17.08	341.60		683.20
	.250	22.42	448.40		896.80
	.3125	27.59		662.16	1103.60
	.375	32.58	651.60	781.92	1303.20
	.500	42.05	841.00		1682.00
10 x 2	.1875	14.53	290.60		581.20
	.250	27.48	549.60		1099.20
10 x 4	.1875	17.08	341.60		683.20
	.250	22.42	448.40		896.80
	.3125	27.59	551.80		1103.60
	.375	32.58	651.60		1303.20
10 x 6	.500	42.05	841.00		1682.00
	.1875	19.63	392.60		785.20
	.250	25.82	516.40		1032.80

Various Sizes Available in 48' and 60'.

RECTANGULAR STRUCTURAL STEEL TUBING ASTM A-500 GR A&B

OUTSIDE DIMENSIONS	WALL THICKNESS	WEIGHT PER FOOT	ESTIMATED WEIGHT STOCK LENGTHS		
			20'	24'	40'
10 x 6	.3125	31.84	636.80		1273.60
	.375	37.69	753.80		1507.60
	.500	48.85	977.00		1954.00
10 x 8	.250	29.23	548.60		1169.20
	.3125	36.10	722.00		1444.00
	.375	42.79	855.80		1711.60
12 x 2	.500	55.66	1113.20		2226.40
	.1875	17.08	341.60		683.20
	.250	22.42	448.40		896.80
12 x 4	.3125	27.59			1103.60
	.375	32.58			1303.20
	.1875	19.63	392.60		785.20
12 x 6	.250	25.82	516.40		1032.80
	.3125	31.84	636.80		1273.60
	.375	37.69	753.80		1507.60
12 x 8	.500	48.85			1954.00
	.1875	22.18	443.60	532.32	887.20
	.250	29.23	584.60		1169.20
12 x 10	.3125	36.10	722.00		1444.00
	.375	42.79	855.80	1026.96	1711.60
	.500	55.66	1113.20		2226.40
14 x 4	.250	32.63	652.60		1305.20
	.3125	40.35			1614.00
	.375	47.90	958.00	1149.60	1916.00
14 x 6	.500	62.46			2498.40
	.250	29.23			1169.20
	.250	32.63			1305.20
14 x 8	.500	62.46			2498.40
	.375	58.10			2324.00
	.375	40.35			1614.00
16 x 4	.375	47.90			1916.00
	.3125	40.35			1614.00
	.500	58.10			2324.00
16 x 6	.500	76.07	1521.40		3042.80
	.375	58.10			2324.00
	.375	40.35			1614.00
18 x 6	.500	76.07			3042.80
	.375	58.10			2324.00
	.500	76.07			3042.80

SHEETS

Size	Decimal Average	Decimal Limits Ga.	Black Wt./Sq. Ft.	Wt./Sheet	
7 GA.	.1793	(.1868-.1719)	7.50		
				48 x 96	240
				48 x 120	300
				48 x 240	600
				60 x 96	300
				60 x 120	375
				60 x 240	750
				72 x 96	360
				72 x 120	450
				72 x 240	900
8 GA.	.1644	(.1718-.1570)	6.875		
9 GA.	.1495	(.1569-.1420)	6.25		
10 GA.	.1345	(.1419-.1271)	5.625		
				48 x 96	180
				48 x 120	225
				48 x 144	270
				48 x 240	450
				60 x 96	225
				60 x 120	281.3
				60 x 144	337.5
				60 x 240	562.5
				72 x 96	270
72 x 120	337.5				
72 x 144	405				
72 x 240	675				
11 GA.	.1196	(.1270-.1121)	5.00		
				48 x 96	160
				48 x 120	200
				48 x 144	240
				48 x 240	400
				60 x 96	200
				60 x 120	250
				60 x 144	300
				60 x 240	500
				72 x 96	240
72 x 120	300				
72 x 144	360				
72 x 240	600				
12 GA.	.1046	(.1120-.0972)	4.375		
				48 x 96	140
				48 x 120	175
				210	

SHEETS

Size	Decimal Average	Decimal Limits Ga.	Black Wt./Sq. Ft.	Wt./Sheet
12 GA.	.1046	(.1120-.0972)	4.375	
		48 x 240		350
		60 x 96		175
		60 x 120		218.8
		60 x 240		437.6
		72 x 96		210
		72 x 120		262.5
		72 x 144		315
		72 x 240		525
13 GA.	.0897	(.0971-.0822)	3.75	
14 GA.	.0747	(.0821-.0710)	3.125	
		48 x 96		100
		48 x 120		125
		48 x 144		150
		60 x 96		125
		60 x 120		156.3
		60 x 144		187.5
15 GA.	.0673	(.0709-.0636)	2.812	
16 GA.	.0598	(.0635-.0568)	2.500	
		36 x 96		60
		36 x 120		75
		36 x 144		90
		48 x 96		80
		48 x 120		100
		48 x 144		120
		60 x 96		100
		60 x 120		125
		60 x 144		150

GALVANIZED SHEETS

Galvanized Sheet	Equivalent Thickness	Gauge Thickness Ordering Limits	Weight Pounds
Gauge No.	Inch	Inch	Square Ft.
10	.1382	.1457-.1308	5.781
11	.1233	.1307-.1159	5.156
12	.1084	.1158-.1009	4.531
13	.0934	.1008-.0860	3.906
14	.0785	.0859-.0748	3.281
15	.0710	.0747-.0673	2.968
16	.0635	.0672-.0606	2.656
17	.0575	.0605-.0546	2.406
18	.0516	.0545-.0486	2.156
19	.0456	.0485-.0426	1.906
20	.0396	.0425-.0382	1.656
21	.0366	.0381-.0352	1.531
22	.0336	.0351-.0322	1.406
23	.0306	.0321-.0292	1.281
24	.0276	.0291-.0262	1.156
25	.0247	.0261-.0232	1.031
26	.0217	.0231-.0210	.906
27	.0202	.0209-.0195	.843
28	.0187	.0194-.0180	.781
29	.0172	.0179-.0165	.718
30	.0157	.0164-.0157	.656

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

Size			Estimated Weight Lbs.		
			Sq. Ft.	Piece	
3/16	48	x	96	7.66	245
			120		306
			144		368
			240		613
			240		613
	60	x	120		383
			240		766
			240		766
	72	x	120		460
			240		919
	84	x	240		1072
			240		1072
	96	x	240		1226
			360		1838
			480		2451
240			1532		
360			2297		
480			3064		
240			1532		
1/4	48	x	96	10.21	327
			120		408
			240		817
			240		817
			240		817
	60	x	120		511
			240		1021
			240		1021
	72	x	120		613
			240		1225
	84	x	120		715
			240		1429
			360		2144
			480		2859
			480		2859
96	x	96	653		
		120	817		
		240	1634		
		360	2450		
		480	3267		
		240	2042		
		360	3063		
5/16	48	x	480	12.76	4084
			96		408
			120		510
			240		1021
			240		1021
	60	x	96		510
			120		638
			240		1276
	72	x	120		766
			240		1531

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

	Size			Estimated Weight Lbs.	
				Sq. Ft.	Piece
5/16	84	x	240	15.32	1786
			480		3573
			120		1021
	96	x	240		2042
			360		3063
			480		4083
			360		3446
			480		4594
			240		2552
			480		5105
3/8	48	x	96	490	
			120	613	
			240	1226	
	60	x	120	766	
			240	1532	
			96	735	
			120	919	
	84	x	240	1838	
			360	2757	
			480	3677	
			120	1072	
			240	2145	
			480	4290	
			96	980	
			120	1226	
			240	2451	
			360	3677	
	108	x	480	4902	
			480	5513	
			120	1532	
240			3064		
7/16	x	360	4596		
		480	6128		
		120	893		
		240	2144		
		240	2859		
		360	4288		
		480	5717		
		240	3573		
		480	7147		
		1/2	x	96	653
120	817				

CARBON STEEL PLATE & COIL
ASTM A-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

Size			Estimated Weight Lbs.		
			Sq. Ft.	Piece	
			240	1634	
60	x		72	613	
			96	817	
			120	1021	
			240	2042	
72	x		96	980	
			120	1225	
			240	2450	
84	x		120	1430	
			240	2859	
			480	5717	
96	x		96	1307	
			120	1634	
			240	3267	
			360	4901	
			480	6534	
108	x		240	3675	
			480	7351	
120	x		120	2042	
			240	4083	
			360	6126	
			480	8168	
9/16	48	x	96	22.95	735
			120		919
	60	x	120		1149
	72	x	240		2757
	96	x	240		3677
			480		7351
	120	x	240		4594
			480		9192
5/8	48	x	96	25.53	817
			120		1021
			240		2042
	60	x	96		1021
			120		1277
			240		2553
	72	x	120		1532
			240		3064
			480		6127
	84	x	120		1787
			240		3574
			480		7184
	96	x	120		2042

CARBON STEEL PLATE & COIL
ASTM A-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

Size			Estimated Weight Lbs.		
			Sq. Ft.	Piece	
5/8			240	4085	
			360	6126	
			480	8168	
	108	x	240	4595	
			480	9190	
	120	x	240	5106	
			360	7657	
			480	10209	
	3/4	48	x	96	30.63
120				1225	
240				2450	
60		x	480	4901	
			96	1225	
			120	1532	
			240	3063	
			480	7351	
72		x	96	1470	
			120	1838	
			240	3676	
			480	7351	
			240	4288	
			480	8576	
84		x	120	2450	
			240	4901	
			360	7351	
			480	9802	
			240	6126	
			360	9189	
7/8		48	x	480	12252
	96			1144	
	120			1430	
	60	x	120	1787	
			240	3574	
			480	7148	
	72	x	120	2144	
			240	4289	
			480	8578	
	84	x	240	5003	
			120	2859	
			240	5718	
96	x	360	8576		
		480	11435		
		120	3574		
		240	7148		
		360	10722		
		480	14293		

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

	Size			Estimated Weight Lbs.			
				Sq. Ft.	Piece		
1	48	x	96	40.84	1307		
			120		1634		
			240		3267		
	60	x	96		1634		
			120		2042		
			240		4084		
	72	x	120		2450		
			240		4901		
			480		9802		
	84	x	480		11435		
			96		3267		
	96	x	240		6534		
			360		9802		
			480		13069		
			108		14702		
120			x	120	4084		
				360	12252		
1 1/8	48	x	480	45.95	16335		
			96		1470		
			120		2297		
	60	x	240		4594		
			480		9188		
			72		5513		
	96	x	96		2940		
			240		7351		
			480		18377		
	1 1/4	48	x		480	51.05	1634
					96		2042
					240		4084
		60	x		120		2552
					240		5105
					72		3063
84		x	120	6126			
			240	7147			
			480	14293			
96		x	120	4084			
			240	8168			
			480	16335			
120		x	240	10210			
			480	20419			

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

	Size			Estimated Weight Lbs.			
				Sq. Ft.	Piece		
1 3/8	96	x	120	56.16	4492		
			240		8984		
	120	x	240		11231		
			480		22461		
1 1/2	48	x	96	61.27	1960		
			120		2450		
	60	x	120		3063		
			240		6127		
	72	x	120		3675		
			240		7352		
	84	x	120		4288		
			240		8578		
	96	x	120		4901		
			240		9803		
			360		14702		
			480		19602		
			120		x	120	6126
						240	12252
360	18377						
480	24503						
1 5/8	96	x	240	66.36	10618		
	120	x	360		19909		
			480		26545		
1 3/4	48	x	96	71.47	2287		
			120		2859		
			240		5717		
	60	x	120		3573		
			240		7147		
			480		14294		
	72	x	120		4288		
			240		8576		
			480		17152		
	96	x	120		5717		
			240		11435		
			480		22870		
120	x	480	28587				
2	48	x	96	81.68	2614		
			120		3267		
	72	x	120		4901		
			240		9801		
	84	x	240		11435		
			480		22870		
	96	x	120		6534		
			240		13068		
		480	26137				

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

	Size			Estimated Weight Lbs.			
				Sq. Ft.	Piece		
2	120	x	240		16335		
			360		24503		
			480		32671		
2 1/4	48	x	96	91.89	2940		
			120		3675		
			240		7351		
	60	x	240		9189		
			72		x	120	5513
	96	x	240		11027		
			120		7351		
			240		14702		
2 1/2	120	x	480	102.10	36755		
			48		x	96	3267
	72	x	120		4084		
			120		6126		
			240		12252		
	96	x	120		8168		
			240		16336		
			120		x	480	40828
2 3/4	48	x	96	112.31	3594		
			96		x	120	8984
			240		17969		
3	48	x	96	122.52	3920		
			60		x	240	12252
			72		x	120	7351
	96	x	240		14702		
			120		9801		
			240		19602		
	120	x	240		24503		
			480		49006		
96			x	120	10618		
3 1/4	96	x	240	132.73	21236		
			120		x	120	8576
3 1/2	72	x	240	142.93	17152		
			96		x	240	24503
3 3/4	96	x	240	153.15	24503		
4	60	x	240	163.36	16335		
			72		x	240	19602
			96		x	240	26137

CARBON STEEL PLATE & COIL
ASTMA-36, A-572 GR. 50, ASME 516-70
AS ROLLED / NORM, ABS GRADES

	Size			Estimated Weight Lbs.	
				Sq. Ft.	Piece
4 1/4	60	x	96	173.57	6943
5	72	x	120	204.20	12252
			240		24503
	96	x	240		32671
5 1/2	96	x	120	224.62	17969
6	96	x	120	245.04	19602
			240		39205

**FLOOR PLATE & COIL
A-36 COMMERCIAL QUALITY
4-WAY MEDIUM PATTERN**

Size		Est. Weight Lbs.		Size		Est. Weight Lbs.		
		Sq. Ft.	Piece			Sq. Ft.	Piece	
1/8 x 48 x 96	120	6.16	197	5/16 x 48 x 96	120	13.81	442	
	240		246		240		552	
			493		240		1105	
	60 x 120		308		60 x 240		1381	
		240		616				
	72 x 96				72 x 120	240		1657
120		370						
240		739		96 x 120		240		2210
3/16 x 48 x 96	120	8.71	279		3/8 x 48 x 96	120	16.37	524
	240		348	240		655		
			697			240		1310
60 x 96	120		436	60 x 96	120		819	
	240		871		240		1637	
			1045		72 x 120			982
72 x 240		240	1964					
84 x 120	240		1219	84 x 240			2292	
96 x 120	240		1394	96 x 120	240		2619	
1/4 x 48 x 96	120	11.26	360	1/2 x 48 x 96	120	21.47	687	
	240		450		240		2576	
			901					
60 x 96	120		450	84 x 240			3006	
	240		563					
			1126		96 x 120			3435
72 x 96		240						
72 x 120	240		1351	3/4 x 48 x 96	120	31.68	1014	
					240			
84 x 96	120			96 x 120	240		5069	
	240		1576					
96 x 96	120			1 x 48 x 96	120	41.89		
	240		1802					
	480		3603				96 x 240	6702

UNIVERSAL MILL PLATES
ASTM A-36

Size		Weight Per Foot		Size		Weight Per Foot	
	In.		Lbs.		In.		Lbs.
3/16	x	9	5.74	1 1/4	x	11	37.44
		10	6.38			12	40.84
		11	7.02			9	38.29
		12	7.66			10	42.54
1/4	x	9	7.66	1 1/2	x	11	46.79
		10	8.51			12	51.05
		11	9.36			9	45.94
		12	10.21			10	51.05
5/16	x	9	9.57	1 3/4	x	11	56.15
		10	10.64			12	61.25
		11	11.70			9	53.60
		12	12.76			10	59.56
3/8	x	9	11.49	2	x	11	65.51
		10	12.76			12	71.47
		11	14.04			9	61.26
		12	15.32			10	68.06
1/2	x	9	15.31			11	74.87
		10	17.02			12	81.68
		11	18.72				
		12	20.42				
5/8	x	9	19.14				
		10	21.27				
		11	23.40				
		12	25.53				
3/4	x	9	22.97				
		10	25.52				
		11	28.08				
		12	30.63				
7/8	x	9	26.80				
		10	29.78				
		11	32.76				
		12	35.73				
1	x	9	30.63				
		10	34.03				

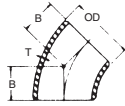
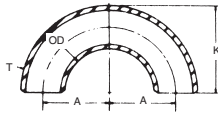
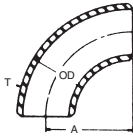
PIPE SCHEDULE
WALL THICKNESS IN INCHES

Pipe Size	O.D. in Inches	10	20	30	40	STD	60	80	XH	120	160	XXH
1/8	.405	.049			.068	.068		.095	.095			
1/4	.540	.065			.088	.088		.199	.199			
3/8	.675	.065			.091	.091		.126	.126			
1/2	.840	.083			.109	.109		.147	.147		.187	.294
3/4	1.050	.083			.113	.113		.154	.154		.218	.308
1	1.315	.109			.133	.133		.179	.179		.250	.358
1 1/4	1.660	.109			.140	.140		.191	.191		.250	.382
1 1/2	1.900	.109			.145	.145		.200	.200		.281	.400
2	2.375	.109			.154	.154		.218	.218		.343	.436
2 1/2	2.875	.120			.203	.203		.276	.276		.375	.552
3	3.500	.120			.216	.216		.300	.300		.437	.600
3 1/2	4.0	.120			.226	.226		.318	.318			.636
4	4.50	.120			.237	.237	.281	.337	.337	.437	.531	.674
4 1/2	5.0					.247			.355			.710
5	5.563	.134			.258	.258		.375	.375	.500	.625	.750
6	6.625	.134			.280	.280		.432	.432	.562	.718	.864
7	7.625					.301			.500			.875
8	8.625	.148	.250	.277	.322	.322	.406	.500	.500	.718	.906	.875
9	9.625					.342			.500			
10	10.75	.165	.250	.307	.365	.365	.500	.593	.500	.843	1.125	
11	11.75					.375			.500			
12	12.75	.180	.250	.330	.406	.375	.562	.687	.500	1.000	1.312	
14	14.0	.250	.312	.375	.437	.375	.593	.750	.500	1.093	1.406	
16	16.0	.250	.312	.375	.500	.375	.656	.843	.500	1.218	1.593	
18	18.0	.250	.312	.437	.562	.375	.750	.937	.500	1.375	1.781	
20	20.0	.250	.375	.500	.593	.375	.812	1.031	.500	1.500	1.968	
22	22.0	.250	.375	.500		.375	.875	1.125	.500	1.625	2.125	
24	24.0	.250	.375	.562	.687	.375	.968	1.218	.500	1.812	2.343	
26	26.0	.312	.500			.375			.500			
28	28.0	.312	.500	.625		.375			.500			
30	30.0	.312	.500	.625		.375			.500			
32	32.0	.312	.500	.625	.688	.375			.500			
34	34.0	.344	.500	.625	.688	.375			.500			
36	36.0	.312	.500	.625	.750	.375			.500			
42	42.0					.375			.500			
48	48.0					.375			.500			

PIPE SCHEDULE
POUNDS PER FOOT

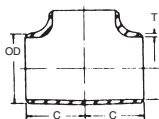
Pipe Size	O.D. in Inches	10	20	30	40	STD	60	80	XH	120	160	XXH
1/8	.405	.1863			.2447	.2447		.3145	.3145			
1/4	.540	.3297			.4248	.4248		.5351	.5351			
3/8	.675	.4235			.5676	.5676		.7388	.7388			
1/2	.840	.6710			.8510	.8510		1.088	1.088		1.304	1.714
3/4	1.050	.8572			1.131	1.131		1.474	1.474		1.937	2.441
1	1.315	1.404			1.679	1.679		2.172	2.172		2.844	3.659
1 1/4	1.660	1.806			2.273	2.273		2.997	2.997		3.765	5.214
1 1/2	1.900	2.085			2.718	2.718		3.631	3.631		4.859	6.408
2	2.375	2.638			3.653	3.653		5.022	5.022		7.444	9.029
2 1/2	2.875	3.531			5.793	5.793		7.661	7.661		10.01	13.70
3	3.500	4.332			7.576	7.576		10.25	10.25		14.32	18.58
3 1/2	4.0	4.973			9.109	9.109		12.51	12.51			22.85
4	4.50	5.613			10.79	10.79	12.66	14.98	14.98	19.01	22.51	27.54
4 1/2	5.0					12.53			17.61			32.53
5	5.563	7.770			14.62	14.62		20.78	20.78	27.04	32.96	38.55
6	6.625	9.289			18.97	18.97		28.57	28.57	36.39	45.30	53.16
7	7.625					23.57			38.05			63.08
8	8.625	13.40	22.36	24.70	28.55	28.55	35.04	43.39	43.49	60.63	74.69	72.42
9	9.625					33.90			48.72			
10	10.75	18.70	28.04	34.24	40.48	40.48	54.74	64.33	54.74	89.20	115.7	
11	11.75					45.55			60.07			
12	12.75	24.20	33.38	43.77	53.53	49.56	73.16	88.51	65.42	125.5	160.3	
14	14.0	36.71	45.68	54.57	63.37	54.57	84.91	106.1	72.09	150.7	189.1	
16	16.0	42.05	52.36	62.58	82.77	62.58	107.5	136.5	82.77	192.3	245.1	
18	18.0	47.39	59.03	82.06	104.8	70.59	138.2	170.8	93.45	244.1	308.5	
20	20.0	52.73	78.60	104.1	122.9	78.60	166.4	208.9	104.1	296.4	379.0	
22	22.0	58.07	86.61	114.8		86.61	197.4	250.8	114.8	353.6	451.1	
24	24.0	63.41	94.62	140.8	171.2	94.62	238.1	296.4	125.5	429.4	541.9	
26	26.0	85.60	136.2			102.6			136.2			
28	28.0	92.26	146.8	182.7		110.6			146.8			
30	30.0	98.93	157.5	196.1		118.6			157.5			
32	32.0	105.6	168.2	209.4	230.1	126.7			168.2			
34	34.0	123.7	178.9	222.8	244.8	134.7			178.9			
36	36.0	118.9	189.6	236.1	282.3	142.7			189.6			
42	42.0					166.7			221.6			
48	48.0					190.7			253.6			

DIMENSIONS

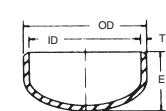


Nom. Pipe Size	O.D.	Wall Thickness T				90° Elbows	
		STD.	XS	160	XX	Long R A	Short R A
1/2	.840	.109	.147			1 1/2	
3/4	1.050	.113	.154		.308	1 1/8	
1	1.315	.133	.179	.250	.358	1 1/2	1
1 1/4	1.660	.140	.191	.250	.382	1 7/8	1 1/4
1 1/2	1.900	.145	.200	.281	.400	2 1/4	1 1/2
2	2.375	.154	.218	.344	.436	3	2
2 1/2	2.875	.203	.276	.375	.552	3 3/4	2 1/2
3	3.500	.216	.300	.438	.600	4 1/2	3
3 1/2	4.000	.226	.318		.636	5 1/4	3 1/2
4	4.500	.237	.337	.531	.674	6	5
5	5.563	.258	.375	.625	.750	7 1/2	5
6	6.625	.280	.432	.719	.864	9	6
8	8.625	.322	.500	.906	.875	12	8
10	10.750	.365	.500	1.125	1.000	15	10
12	12.750	.375	.500	1.312	1.000	18	12
14	14.000	.375	.500			21	14
16	16.000	.375	.500			24	16
18	18.000	.375	.500			27	18
20	20.000	.375	.500			30	20
22	22.000	.375	.500			33	
24	24.000	.375	.500			36	24
26	26.000	.375	.500			39	
30	30.000	.375	.500			45	30
34	34.000	.375	.500			51	
36	36.000	.375	.500			54	36
42	42.000	.375	.500			63	48

WELDING FITTINGS

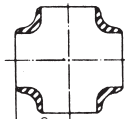


180° RETURNS

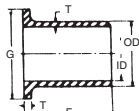


45°
ELBOWS

TEES



CAPS
CROSSES

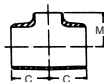


STUB ENDS

LONG R K
SHORT R K

	B	C	E	C	F	G
1 7/8	5/8	1	1		3	1 3/8
1 11/16	7/16	1 1/8	1		3	1 11/16
2 3/16	1 5/8	7/8	1 1/2		4	2
2 3/4	2 1/16	1	1 7/8	1 7/8	4	2 1/2
3 1/4	2 7/16	1 1/8	2 1/4	2 1/4	4	2 7/8
4 3/16	3 3/16	1 3/8	2 1/2	1 1/2*	6	3 5/8
5 3/16	3 15/16	1 3/4	3	1 1/2*	6	4 1/8
6 1/4	4 3/4	2	3 3/8	2*	6	5
7 1/4	5 1/2	2 1/4	3 3/4	2 1/2*	6	5 1/2
8 1/4	6 1/4	2 1/2	4 1/8	2 1/2*	6	6 3/16
10 5/16	7 3/4	3 1/8	4 7/8	3*	8	7 5/16
12 5/16	9 5/16	3 3/4	5 5/8	3 1/2*	8	8 1/2
16 5/16	12 5/16	5	7	4*	8	10 5/8
20 3/8	15 3/8	6 1/4	8 1/2	5*	10	12 3/4
24 3/8	18 3/8	7 1/2	10	6*	10	15
28	21	8 3/4	11	6 1/2*	12	16 1/4
32	24	10	12	7*	12	18 1/2
36	27	11 1/4	13 1/2	8*	12	21
40	30	12 1/2	15	9*	12	23
44		13 1/2	16 1/2	10		
48	36	15	17	10 1/2	12	27 1/4
52		16	19 1/2	10 1/2		
60	45	18 1/2	22	10 1/2		
		21	25	10 1/2		
	54	22 1/4	26 1/2	10 1/2		
		26		12		

*Dimensions apply to STD and XS only.

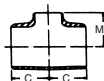


CONCENTRIC AND
ECCENTRIC REDUCERS

REDUCING OUTLET TEES

NOM PIPE SIZE

			H	C	M
1/2	x	1/4		1	1
		3/8		1	1
3/4	x	3/8	1 1/2	1 1/8	1 1/8
		1/2	1 1/2	1 1/8	1 1/8
1	x	3/8	2	1 1/2	1 1/2
		1/2	2	1 1/2	1 1/2
		3/4	2	1 1/2	1 1/2
1 1/4	x	1/2	2	1 7/8	1 7/8
		3/4	2	1 7/8	1 7/8
		1	2	1 7/8	1 7/8
1 1/2	x	1/2	2 1/2	2 1/4	2 1/4
		3/4	2 1/2	2 1/4	2 1/4
		1	2 1/2	2 1/4	2 1/4
		1 1/4	2 1/2	2 1/4	2 1/4
2	x	3/4	3	2 1/2	1 3/4
		1	3	2 1/2	2
		1 1/4	3	2 1/2	2 1/4
		1 1/2	3	2 1/2	2 3/8
2 1/2	x	1	3 1/2	3	2 1/4
		1 1/4	3 1/2	3	2 1/2
		1 1/2	3 1/2	3	2 5/8
		2	3 1/2	3	2 3/4
3	x	1	3 1/2	3 3/8	2 5/8
		1 1/4	3 1/2	3 3/8	2 3/4
		1 1/2	3 1/2	3 3/8	2 7/8
		2	3 1/2	3 3/8	3
		2 1/2	3 1/2	3 3/8	3 1/4
3 1/2	x	1 1/4	4	--	--
		1 1/2	4	3 3/4	3 1/8
		2	4	3 3/4	3 1/4
		2 1/2	4	3 3/4	3 1/2
		3	4	3 3/4	3 5/8
4	x	1 1/2	4	4 1/8	3 3/8
		2	4	4 1/8	3 1/2
		2 1/2	4	4 1/8	3 3/4



CONCENTRIC AND
ECCENTRIC REDUCERS

REDUCING OUTLET TEES

NOM PIPE SIZE

		H	C	M	
		3	4	4 1/8	3 7/8
		3 1/2	4	4 1/8	4
5	x	2	5	4 7/8	4 1/8
		2 1/2	5	4 7/8	4 1/4
		3	5	4 7/8	4 3/8
		3 1/2	5	4 7/8	4 1/2
		4	5	4 7/8	4 5/8
		4	5	4 7/8	4 5/8
6	x	2 1/2	5 1/2	5 5/8	4 3/4
		3	5 1/2	5 5/8	4 7/8
		3 1/2	5 1/2	5 5/8	5
		4	5 1/2	5 5/8	5 1/8
		5	5 1/2	5 5/8	5 3/8
8	x	3	--	7	6
		3 1/2	6	7	6
		4	6	7	6 1/8
		5	6	7	6 3/8
		6	6	7	6 5/8
10	x	4	7	8 1/2	7 1/4
		5	7	8 1/2	7 1/2
		6	7	8 1/2	7 5/8
		8	7	8 1/2	8
12	x	5	8	10	8 1/2
		6	8	10	8 5/8
		8	8	10	9
		10	8	10	9 1/2
14	x	6	13	11	9 3/8
		8	13	11	9 1/4
		10	13	11	10 1/8
		12	13	11	10 5/8

WEIGHTS

NOM. PIPE SIZE	90° ELBOWS						45° ELBOWS				
	STD	L.R.			S.R.		STD	L.R.			
		XH	S160	XXH	STD	XH		XH	S160	XXH	
2	1.5	2.0	3.25	3.75	.90	1.5	.8	1.0	1.75	2.13	
2 1/2	3.0	3.2	6.0	7.13	1.96	3.1	1.7	1.9	3.0	3.75	
3	4.5	6.0	11.1	11.2	3.0	4.3	2.2	3.0	5.7	5.8	
3 1/2	6.2	8.5		16.2	4.0	6.0	3.1	4.7		8.6	
4	8.5	11.7	20.0	21.2	6.3	8.5	4.2	5.9	11	12	
5	14.2	20.0	33.0	38.0	9.6	14.3	7.2	10	17	19	
6	23	33.5	53.1	63	18	23	11.5	17	27	31	
8	45	69	127	120	34	46	22.5	34	64	60	
10	78	107	270		58	72	39	53	135		
12	118	151	480		82	106	59	74	230		
14	147	188	563		104	132	74	87	278		
16	202	262	825		118	160	101	131	415		
18	256	338			148	194	128	170			
20	310	409			210	280	155	205			
24	446	591			288	370	223	295			

NOM. PIPE SIZE	180° RETURN BENDS						TEES				
	STD	L.R.			S.R.		STD	STRAIGHT			
		XH	S160	XXH	STD	XH		XH	S160	XXH	
2	3.0	4.0	6.5	9.7	1.8	3.0	3.3	4.0	4.0	6.0	
2 1/2	6.0	6.5	12	13.4	4.0	6.2	5.9	6.7	7.0	9.4	
3	9.0	12.0	22	24	6.0	8.6	7.6	9.0	11.5	13.9	
3 1/2	12.5	17.0		33	8.0	12.0	10.5	13.0			
4	17	24	40	42	12.6	17	12	15.7	21.7	26	
5	29	40	66	76	19	29	22	26	43	43	
6	46	67	107	125	36	46	34	44	63	69	
8	90	138	254	240	68	95	54	76	114	120	
10	156	215	540		116	151	88	106	260		
12	236	300	920		164	216	126	161	481		
14	294	376	1109		208	264	150	222	519		
16	404	524	1690		236	320	218	264	803		
18							295	358			
20							363	450			
24							515	625			

WEIGHTS

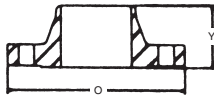
NOM. PIPE SIZE	CAPS			
	STD	XH	S160	XXH
1 1/4	.35			
1 1/2	.40		.90	1.0
2	.50	.70	1.3	1.5
2 1/2	.90	1.2	2.1	2.4
3	1.5	1.8	3.6	3.7
3 1/2	2.2	2.6		
4	2.6	3.3	5.7	6.8
5	4.6	5.4	8.3	10
6	6.8	9.4	15.2	16.6
8	12.4	16.5	31	29
10	21	27	60	
12	30	39	100	
14	35	48	130	
16	45	55	178	
18	60	74	254	
20	72	89	419	
22	72	108		
24	102	126	530	
26	109	142		
28	118	153		
30	130	169		
32	151	201		
34	160	212		
36	166	219		
42	231	314		
48	308	407		

WEIGHTS

NOM. PIPE SIZE	OUT- LET	REDUCERS CONC. - ECC.				TEES REDUCERS			
		STD	XH	S160	XXH	STD	XH	S160	XXH
		3/4	1/2	.25	.27			.38	.48
1	1/2	.30	.33	.65	.80	.77	.87	.90	1.14
1	3/4	.32	.36	.66	.82	.80	.95	1.0	1.19
1 1/4	3/4	.37	.46	.51	2.3	1.51	1.66	1.68	2.02
1 1/4	1	.39	.49	.59	2.5	1.52	1.90	2.0	2.14
1 1/2	1/4	.47	.55	.74	2.9	1.70	2.45	2.49	2.93
1 1/2	1	.50	.61	.81	2.9	1.85	2.50	2.60	3.08
1 1/2	1 1/4	.58	.66	.90	3.0	2.0	2.69	2.90	3.26
2	1	.89	.90	1.5	3.1	2.33	3.0	3.6	4.41
2	1 1/4	.94	1.0	1.8	3.2	2.77	3.62	3.75	4.65
2	1 1/2	1.0	1.2	1.8	3.3	3.12	3.8	3.9	5.18
2 1/2	1 1/4	1.6	1.8	2.3	3.4	4.3	6.0	6.0	8.4
2 1/2	1 1/2	1.7	2.0	2.4	3.5	4.75	6.2	6.2	9.13
2 1/2	2	1.8	2.3	2.6	3.6	5.2	6.3	6.6	9.2
3	1 1/2	2.4	2.7	3.1	3.9	6.4	8.8	9.4	12.2
3	2	2.6	2.8	3.4	4.3	7.5	9.0	9.7	12.5
3	2 1/2	2.6	2.9	3.8	4.3	7.5	9.0	10.2	13.3
3 1/2	2	2.8	3.4		5.6	9.2	11.2		16.7
3 1/2	2 1/2	2.8	3.5		5.9	9.5	12.0		17.5
3 1/2	3	2.9	4.0		6.2	10.0	12.6		18.5
4	2	3.0	4.5	5.6	6.7	10.2	13.0	17.2	22.0
4	2 1/2	3.0	4.6	5.6	6.9	10.7	13.6	17.7	22.7
4	3	3.1	4.8	5.8	7.1	11.0	13.2	18.5	23.3
4	3 1/2	3.1	4.9		7.4	11.6	14.9		24.5
5	2 1/2	3.4	5.5	9.0	12.2				
5	3	3.6	5.8	10.5	13.7	20.8	24.5	42.7	37.2
5	3 1/2	3.7	6.1		14.9	21.0	24.7		38.0
5	4	3.8	6.5	11.7	15.5	21.5	24.8	33.2	39.0
6	2	4.28	7.75			31.0	35.0	45.5	53.0
6	2 1/2	4.4	8.25	13	17.5	32.0	41.3	48.2	56.6
6	3	4.6	6.8	15.0	18.2	32.1	41.3	48.9	57.5
6	3 1/2	4.8	9.0		19.0	32.2	41.4		58.5
6	4	5.0	11.0	17.5	19.7	32.4	41.5	50.5	59.3
6	5	5.3	12.0	19.1	21.0	32.5	41.6	52.6	62.1
8	4	8.1	16.5	33.0	28.5	51.0	67.0	98.5	97.6

WEIGHTS

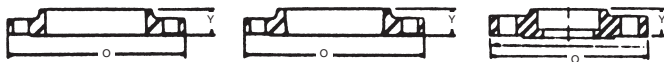
NOM. PIPE SIZE	OUT- LET	REDUCERS CONC. - ECC.				TEES REDUCERS			
		STD	XH	S160	XXH	STD	XH	S160	
		8	5	8.5	17.2	37.0	30.0	51.6	67.3
8	6	9.0	18.5	41.0	33.0	52.7	68.0	104	106
10	5	15.0	25.0	49.0	44.0	75	96		190
10	6	17.0	28.0	53.0	48.0	79.0	99.0		194
10	8	21.0	30.0	59.0	52.0	79.2	100		210
12	6	28.0	34.0	75.0	69.0	106	137		310
12	8	30.0	36.0	84.0	72.0	106	140		315
12	10	32.0	39.0	94.0	75.0	107	149		334
14	8	60.0	61.0	125		147	187		436
14	10	61.0	62.0	137		150	190		470
14	12	64.0	75.0	154		152	196		496
16	8	69.0	90.0	169		186	236		627
16	10	72.0	95.0	190		196	248		656
16	12	75.0	101	221		212	259		675
16	14	80.0	106	265		219	261		722
18	12	82	115	315		216	332		839
18	14	84	117	336		270	340		873
18	16	85	119	351		282	352		916
20	14	117	153	520		329	418		1195
20	16	123	158	556		341	432		1239
20	18	126	165	581		355	449		1280
24	16	156	194	761		479	585		1962
24	18	160	198	784		490	597		2010
24	20	165	205	812		506	614		2087



WELDING NECK FLANGES

NOM. PIPE SIZE	150 LB.		300 LB.		400 LB.		600 LB.	
	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽¹⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽¹⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽²⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽²⁾
	1/2	3 1/2	1 7/8	3 3/4	2 1/16	3 3/4	2 1/16	3 3/4
3/4	3 7/8	2 1/16	4 5/8	2 1/4	4 5/8	2 1/4	4 5/8	2 1/4
1	4 1/4	2 3/16	4 7/8	2 7/16	4 7/8	2 7/16	4 7/8	2 7/16
1 1/4	4 5/8	2 1/4	5 1/4	2 9/16	5 1/4	2 5/8	5 1/4	2 5/8
1 1/2	5	2 7/16	6 1/8	2 11/16	6 1/8	2 3/4	6 1/8	2 3/4
2	6	2 1/2	6 1/2	2 3/4	6 1/2	2 7/8	6 1/2	2 7/8
2 1/2	7	2 3/4	7 1/2	3	7 1/2	3 1/8	7 1/2	3 1/8
3	7 1/2	2 3/4	8 1/4	3 1/8	8 1/4	3 1/4	8 1/4	3 1/4
3 1/2	8 1/2	2 13/16	9	3 3/16	9	3 3/8	9	3 3/8
4	9	3	10	3 3/8	10	3 1/2	10 3/4	4
5	10	3 1/2	11	3 7/8	11	4	13	4 1/2
6	11	3 1/2	12 1/2	3 7/8	12 1/2	4 1/16	14	4 5/8
8	13 1/2	4	15	4 3/8	15	4 5/8	16 1/2	5 1/4
10	16	4	17 1/2	4 5/8	17 1/2	4 7/8	20	6
12	19	4 1/2	20 1/2	5 1/8	20 1/2	5 3/8	22	6 1/8
14	21	5	23	5 5/8	23	5 7/8	23 3/4	6 1/2
16	23 1/2	5	25 1/2	5 3/4	25 1/2	6	27	7
18	25	5 1/2	28	6 1/4	28	6 1/2	29 1/4	7 1/4
20	27 1/2	5 11/16	30 1/2	6 3/8	30 1/2	6 5/8	32	7 1/2
22	29 1/2	5 7/8	33	6 1/2	33	6 3/4	34 1/4	7 3/4
24	32	6	36	6 5/8	36	6 7/8	37	8
26	34 1/4	5	38 1/4	7 1/4	38 1/4	7 5/8	40	8 3/4
30	38 3/4	5 1/8	43	8 1/4	43	8 5/8	44 1/2	9 3/4
34	43 3/4	5 5/16	47 1/2	9 1/8	47 1/2	9 1/2	49	10 5/8
36	46	5 3/8	50	9 1/2	50	9 7/8	51 3/4	11 1/8
42	53	5 5/8	57	10 7/8	57	11 3/8	58 3/4	12 3/4

- (1) The 1/16" raised face is included in "Length thru Hub 'Y'."
 (2) The 1/4" raised face is not included in "Length thru Hub 'Y'."



SLIP-ON, THREADED, AND SOCKET TYPE FLANGES

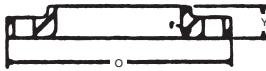
NOM. PIPE SIZE	150 LB.		300 LB.		400 LB.		600 LB.	
	OUTSIDE DIAM OF FLANGE	LENGTH THRU HUB	OUTSIDE DIAM OF FLANGE	LENGTH THRU HUB	OUTSIDE DIAM OF FLANGE	LENGTH THRU HUB	OUTSIDE DIAM OF FLANGE	LENGTH THRU HUB
	O	Y ⁽¹⁾	O	Y ⁽¹⁾	O	Y ⁽²⁾	O	Y ⁽²⁾
1/2	3 1/2	5/8	3 3/4	7/8	3 3/4	7/8	3 3/4	7/8
3/4	3 7/8	5/8	4 5/8	1	4 5/8	1	4 5/8	1
1	4 1/4	11/16	4 7/8	1 1/16	4 7/8	1 1/16	4 7/8	1 1/16
1 1/4	4 5/8	13/16	5 1/4	1 1/16	5 1/4	1 1/8	5 1/4	1 1/8
1 1/2	5	7/8	6 1/8	1 3/16	6 1/8	1 1/4	6 1/8	1 1/4
2	6	1	6 1/2	1 5/16	6 1/2	1 7/16	6 1/2	1 7/16
2 1/2	7	1 1/8	7 1/2	1 1/2	7 1/2	1 5/8	7 1/2	1 5/8
3	7 1/2	1 3/16	8 1/4	1 11/16	8 1/4	1 13/16	8 1/4	1 13/16
3 1/2	8 1/2	1 1/4	9	1 3/4	9	1 15/16	9	1 15/16
4	9	1 5/16	10	1 7/8	10	2 †	10 3/4	2 1/8 ‡
5	10	1 7/16	11	2 ‡	11	2 1/8 ‡	13	2 3/8 ‡
6	11	1 9/16	12 1/2	2 1/16 ‡	12 1/2	2 1/4 ‡	14	2 5/8 ‡
8	13 1/2	1 3/4	15	2 7/16 ‡	15	2 11/16 ‡	16 1/2	3 ‡
10	16	1 15/16	17 1/2	2 5/8 ‡	17 1/2	2 7/8 ‡	20	3 3/8 ‡
12	19	2 3/16	20 1/2	2 7/8 ‡	20 1/2	3 1/8 ‡	22	3 5/8 ‡
14	21	2 1/4	23	3 ‡	23	3 5/16 ‡	23 3/4	3 11/16 ‡
16	23 1/2	2 1/2	25 1/2	3 1/4 ‡	25 1/2	3 11/16 ‡	27	4 3/16 ‡
18	25	2 11/16	28	3 1/2 ‡	28	3 7/8 ‡	29 1/4	4 5/8 ‡
20	27 1/2	2 7/8	30 1/2	3 3/4 ‡	30 1/2	4 ‡	32	5 ‡
22	29 1/2	3 1/8 † ‡	33	4 † ‡	33	4 1/4 † ‡	34 1/4	5 1/4 † ‡
24	32	3 1/4	36	4 3/16 ‡	36	4 1/2 ‡	37	5 1/2 ‡
26	34 1/4	3 3/8 † ‡	38 1/4	7 1/4 † ‡	38 1/4	7 5/8 † ‡	40	8 3/4 † ‡
30	38 3/4	3 1/2 † ‡	43	8 1/4 † ‡	43	8 5/8 † ‡	44 1/2	9 3/4 † ‡
34	43 3/4	3 11/16 † ‡	47 1/2	9 1/8 † ‡	47 1/2	9 1/2 † ‡	49	10 5/8 † ‡
36	46	3 3/4 † ‡	50	9 1/2 † ‡	50	9 7/8 † ‡	51 3/4	11 1/8 † ‡
42	53	4 † ‡	57	10 7/8 † ‡	57	11 3/8 † ‡	58 3/4	12 3/4 † ‡

(1) The 1/16" raised face is included in "Length thru Hub 'Y'."

(2) The 1/4" raised face is not included in "Length thru Hub 'Y'."

† Not available in Threaded type.

‡ Not available in Socket type.



LAP JOINT FLANGES

NOM. PIPE SIZE	150 LB.		300 LB.		400 LB.		600 LB.	
	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽¹⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽¹⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽²⁾	OUTSIDE DIAM OF FLANGE O	LENGTH THRU HUB Y ⁽²⁾
	1/2	3 1/2	5/8	3 3/4	7/8	3 3/4	7/8	3 3/4
3/4	3 7/8	5/8	4 5/8	1	4 5/8	1	4 5/8	1
1	4 1/4	11/16	4 7/8	1 1/16	4 7/8	1 1/16	4 7/8	1 1/16
1 1/4	4 5/8	13/16	5 1/4	1 1/16	5 1/4	1 1/8	5 1/4	1 1/8
1 1/2	5	7/8	6 1/8	1 3/16	6 1/8	1 1/4	6 1/8	1 1/4
2	6	1	6 1/2	1 5/16	6 1/2	1 7/16	6 1/2	1 7/16
2 1/2	7	1 1/8	7 1/2	1 1/2	7 1/2	1 5/8	7 1/2	1 5/8
3	7 1/2	1 3/16	8 1/4	1 11/16	8 1/4	1 13/16	8 1/4	1 13/16
3 1/2	8 1/2	1 1/4	9	1 3/4	9	1 15/16	9	1 15/16
4	9	1 5/16	10	1 7/8	10	2	10 3/4	2 1/8
5	10	1 7/16	11	2	11	2 1/8	13	2 3/8
6	11	1 9/16	12 1/2	2 1/16	12 1/2	2 1/4	14	2 5/8
8	13 1/2	1 3/4	15	2 7/16	15	2 11/16	16 1/2	3
10	16	1 15/16	17 1/2	3 3/4	17 1/2	4	20	4 3/8
12	19	2 3/16	20 1/2	4	20 1/2	4 1/4	22	4 5/8
14	21	3 1/8	23	4 3/8	23	4 5/8	23 3/4	5
16	23 1/2	3 7/16	25 1/2	4 3/4	25 1/2	5	27	5 1/2
18	25	3 13/16	28	5 1/8	28	5 3/8	29 1/4	6
20	27 1/2	4 1/16	30 1/2	5 1/2	30 1/2	5 3/4	32	6 1/2
24	32	4 3/8	36	6	36	6 1/4	37	7 1/4

(1) The 1/16" raised face is included in "Length thru Hub 'Y'."

(2) The 1/4" raised face is **not** included in "Length thru Hub 'Y'."



BLIND FLANGES

NOM. PIPE SIZE	150 LB.		300 LB.		400 LB.		600 LB.	
	OUTSIDE DIAM OF FLANGE	THICKNESS	OUTSIDE DIAM OF FLANGE	THICKNESS	OUTSIDE DIAM OF FLANGE	THICKNESS	OUTSIDE DIAM OF FLANGE	THICKNESS
	O	Q ⁽¹⁾	O	Q ⁽¹⁾	O	Q ⁽²⁾	O	Q ⁽²⁾
1/2	3 1/2	7/16	3 3/4	9/16	3 3/4	9 1/6	3 3/4	9/16
3/4	3 7/8	1/2	4 5/8	5/8	4 5/8	5/8	4 5/8	5/8
1	4 1/4	9/16	4 7/8	11/16	4 7/8	11/16	4 7/8	11/16
1 1/4	4 5/8	5/8	5 1/4	3/4	5 1/4	13/16	5 1/4	13/16
1 1/2	5	11/16	6 1/8	13/16	6 1/8	7/8	6 1/8	7/8
2	6	3/4	6 1/2	7/8	6 1/2	1	6 1/2	1
2 1/2	7	7/8	7 1/2	1	7 1/2	1 1/8	7 1/2	1 1/8
3	7 1/2	15/16	8 1/4	1 1/8	8 1/4	1 1/4	8 1/4	1 1/4
3 1/2	8 1/2	15/16	9	1 3/16	9	1 3/8	9	1 3/8
4	9	15/16	10	1 1/4	10	1 3/8	10 3/4	1 1/2
5	10	15/16	11	1 3/8	11	1 1/2	13	1 3/4
6	11	1	12 1/2	1 7/16	12 1/2	1 5/8	14	1 7/8
8	13 1/2	1 1/8	15	1 5/8	15	1 7/8	16 1/2	2 3/16
10	16	1 3/16	17 1/2	1 7/8	17 1/2	2 1/8	20	2 1/2
12	19	1 1/4	20 1/2	2	20 1/2	2 1/4	22	2 5/8
14	21	1 3/8	23	2 1/8	23	2 3/8	23 3/4	2 3/4
16	23 1/2	1 7/16	25 1/2	2 1/4	25 1/2	2 1/2	27	3
18	25	1 9/16	28	2 3/8	28	2 5/8	29 1/4	3 1/4
20	27 1/2	1 11/16	30 1/2	2 1/2	30 1/2	2 3/4	32	3 1/2
22	29 1/2	1 13/16	33	2 5/8	33	2 7/8	34 1/4	3 3/4
24	32	1 7/8	36	2 3/4	36	3	37	4
26	34 1/4	2	38 1/4	3 1/8	38 1/4	3 1/2	40	4 1/4
30	38 3/4	2 1/8	43	3 5/8	43	4	44 1/2	4 1/2
34	43 3/4	2 5/16	47 1/2	4	47 1/2	4 3/8	49	4 3/4
36	46	2 3/8	50	4 1/8	50	4 1/2	51 3/4	4 7/8
42	53	2 5/8	57	4 5/8	57	5 1/8	58 3/4	5 1/2

- (1) The 1/16" raised face is included in "Thickness 'Q'."
 (2) The 1/4" raised face is not included in "Thickness 'Q'."

APPROXIMATE WEIGHT (LBS.)

PRESS. CLASS	PIPE SIZE	NOM. WELD NECK	SLIP-ON	THD	LAP JOINT	BLIND	SOCKET TYPE
150	1/2	2	1	1	1	2	2
	3/4	2	1.5	1.5	1.5	2	2
	1	2.5	2	2	2	2	2
	1 1/4	2.5	2.5	2.5	2.5	3	3
	1 1/2	4	3	3	3	3	3
	2	6	5	5	5	4	5
	2 1/2	10	8	8	8	7	7
	3	11.5	9	10	9	9	8
	3 1/2	12	11	12	11	13	
	4	16.5	13	13	12	17	
	5	21	15	15	13	20	
	6	26	17	19.5	18	27	
	8	42	28	30	28	47	
	10	54	40	41	36	67	
	12	88	61	65	60	123	
	14	114	83	85	77	139	
	16	142	106	93	104	187	
	18	165	109	120	146	217	
	20	197	148	155	159	283	
	24	268	204	210	195	415	
300	1/2	2	1.5	1.5	1.5	2	3
	3/4	3	2.5	2.5	2.5	3	3
	1	4	3	3	3	4	3
	1 1/4	5	4.5	4.5	4.5	6	4
	1 1/2	7	6.5	6.5	6.5	7	6
	2	8	7	7	7	8	7
	2 1/2	12	10	10	10	12	10
	3	18	13	14	14.5	16	13
	3 1/2	20	16	16	16	21	
	4	26.5	23.5	24	24	28	
	5	36	29	31	26	37	
	6	45	36	36	38	48	
	8	69	56	56	55	79	
	10	100	77	80	88	122	
	12	142	113	110	139	183	
	14	206	159	164	184	241	
16	249	210	220	234	315		

APPROXIMATE WEIGHT (LBS.)

PRESS. CLASS	PIPE SIZE	NOM. WELD NECK	SLIP-ON	THD	LAP JOINT	BLIND	SOCKET TYPE
400	18	306	253	280	305	414	
	20	369	307	325	375	515	
	24	579	490	490	530	800	
	4	30	24	24	22	33	
	5	39	31	31	29	44	
	6	49	39	39	37	61	
	8	78	63	63	59	100	
	10	110	91	91	95	155	
	12	160	129	129	152	226	
	14	233	191	191	210	310	
	16	294	253	253	280	398	
	18	360	310	310	345	502	
	20	445	378	378	420	621	
	24	640	539	539	615	936	
600	1/2	3	2	2	2	2	3
	3/4	3.5	3	3	3	3	3
	1	4	3.5	3.5	3.5	4	4
	1 1/4	5.5	4.5	4.5	4.5	6	6
	1 1/2	8	6.5	6.5	6.5	8	7
	2	10	8	8	8	10	9
	2 1/2	14	12	12	11	15	13
	3	18	15	15	14	20	16
	3 1/2	26	21	21	20	29	
	4	37	33	33	31	41	
	5	68	63	63	63	68	
	6	73	80	80	78	86	
	8	112	97	97	112	139	
	10	189	177	177	195	231	
	12	226	215	215	240	295	
	14	347	259	259	290	378	
	16	481	366	366	400	527	
	18	555	476	476	469	665	
	20	690	612	612	604	855	
	24	977	876	876	866	1175	

Weights of Class 400 flanges, sizes NPS 1/2 through 3 1/2 are same as Class 600.

BOLTING DIMENSIONS FOR 150 LB. FLANGES

150 LB. STEEL FLANGES

NOM. PIPE SIZE	DIAMETER OF BOLT CIRCLE	DIAMETER OF BOLTS	NO. OF BOLTS	LENGTH OF STUDS (1/16" RAISED FACE)	BOLT LENGTH
1/2	2 3/8	1/2	4	2 1/4	1 3/4
3/4	2 3/4	1/2	4	2 1/4	2
1	3 1/8	1/2	4	2 1/2	2
1 1/4	3 1/2	1/2	4	2 1/2	2 1/4
1 1/2	3 7/8	1/2	4	2 3/4	2 1/4
2	4 3/4	5/8	4	3	2 3/4
2 1/2	5 1/2	5/8	4	3 1/4	3
3	6	5/8	4	3 1/2	3
3 1/2	7	5/8	8	3 1/2	3
4	7 1/2	5/8	8	3 1/2	3
5	8 1/2	3/4	8	3 3/4	3 1/4
6	9 1/2	3/4	8	3 3/4	3 1/4
8	11 3/4	3/4	8	4	3 1/2
10	14 1/4	7/8	12	4 1/2	3 3/4
12	17	7/8	12	4 1/2	4
14	18 3/4	1	12	5	4 1/4
16	21 1/4	1	16	5 1/4	4 1/2
18	22 3/4	1 1/8	16	5 3/4	4 3/4
20	25	1 1/8	20	6	5 1/4
22	27 1/4	1 1/4	20	6 1/2	5 1/2
24	29 1/2	1 1/4	20	6 3/4	5 3/4
26	31 3/4	1 1/4	24	7	6
30	36	1 1/4	28	7 1/4	6 1/4
34	40 1/2	1 1/2	32	8	7
36	42 3/4	1 1/2	32	8 1/4	7
42	49 1/2	1 1/2	36	8 3/4	7 1/2

Stud lengths for lap joint flanges are equal to lengths shown plus the thickness of two laps of the stub ends.

Bolting arrangement for 125 lb. cast iron flanges are the same as shown for 150 lb. steel flanges.

BOLTING DIMENSIONS FOR 300 LB. FLANGES

300 LB. STEEL FLANGES

NOM. PIPE SIZE	DIAMETER OF BOLT CIRCLE	DIAMETER OF BOLTS	NO. OF BOLTS	LENGTH OF STUDS (1/16" RAISED FACE)	BOLT LENGTH
1/2	2 5/8	1/2	4	2 1/2	2
3/4	3 1/4	5/8	4	2 3/4	2 1/2
1	3 1/2	5/8	4	3	2 1/2
1 1/4	3 7/8	5/8	4	3	2 3/4
1 1/2	4 1/2	3/4	4	3 1/2	3
2	5	5/8	8	3 1/4	3
2 1/2	5 7/8	3/4	8	3 3/4	3 1/4
3	6 5/8	3/4	8	4	3 1/2
3 1/2	7 1/4	3/4	8	4 1/4	3 3/4
4	7 7/8	3/4	8	4 1/4	3 3/4
5	9 1/4	3/4	8	4 1/2	4
6	10 5/8	3/4	12	4 3/4	4 1/4
8	13	7/8	12	5 1/4	4 3/4
10	15 1/4	1	16	6	5 1/4
12	17 3/4	1 1/8	16	6 1/2	5 3/4
14	20 1/4	1 1/8	20	6 3/4	6
16	22 1/2	1 1/4	20	7 1/4	6 1/2
18	24 3/4	1 1/4	24	7 1/2	6 3/4
20	27	1 1/4	24	8	7
22	29 1/4	1 1/2	24	8 3/4	7 1/2
24	32	1 1/2	24	9	7 3/4
26	34 1/2	1 5/8	28	10	8 3/4
30	39 1/4	1 3/4	28	11 1/4	10
34	43 1/2	1 7/8	28	12 1/4	10 3/4
36	46	2	32	12 3/4	11 1/4
42	52 3/4	2	36	13 3/4	13 1/2

Bolting arrangement for 250 lb. cast iron flanges are the same as shown for 300 lb. steel flanges.

BOLTING DIMENSIONS FOR 400 AND 600 LB. FLANGES

NOM. PIPE SIZE	400 LB. STEEL FLANGES				600 LB. STEEL FLANGES			
	DIAMETER OF BOLT CIRCLE	DIAMETER OF BOLTS	NO. OF BOLTS	LENGTH OF STUDS (1/4" RAISED FACE)	DIAMETER OF BOLT CIRCLE	DIAMETER OF BOLTS	NO. OF BOLTS	LENGTH OF STUDS (1/4" RAISED FACE)
1/2	2 5/8	1/2	4	3	2 5/8	1/2	4	3
3/4	3 1/4	5/8	4	3 1/4	3 1/4	5/8	4	3 1/4
1	3 1/2	5/8	4	3 1/2	3 1/2	5/8	4	3 1/2
1 1/4	3 7/8	5/8	4	3 3/4	3 7/8	5/8	4	3 3/4
1 1/2	4 1/2	3/4	4	4	4 1/2	3/4	4	4
2	5	5/8	8	4	6	5/8	8	4
2 1/2	5 7/8	3/4	8	4 1/2	5 7/8	3/4	8	4 1/2
3	6 5/8	3/4	8	4 3/4	6 5/8	3/4	8	4 3/4
3 1/2	7 1/4	7/8	8	5 1/4	7 1/4	7/8	8	5 1/4
4	7 7/8	7/8	8	5 1/4	8 1/2	7/8	8	5 1/2
5	9 1/4	7/8	8	6 1/2	10 1/2	1	8	6 1/4
6	10 5/8	7/8	12	5 3/4	11 1/2	1	12	6 1/2
8	13	1	12	6 1/2	13 3/4	1 1/8	12	7 1/2
10	15 1/4	1 1/8	16	7 1/4	17	1 1/4	16	8 1/4
12	17 3/4	1 1/4	16	7 3/4	19 1/4	1 1/4	20	8 1/2
14	20 1/4	1 1/4	20	8	20 3/4	1 3/8	20	9
16	22 1/2	1 3/8	20	8 1/2	23 3/4	1 1/2	20	9 3/4
18	24 3/4	1 3/8	24	8 3/4	25 3/4	1 5/8	20	10 1/2
20	27	1 1/2	24	9 1/2	28 1/2	1 5/8	24	11 1/4
22	29 1/4	1 5/8	24	10	30 5/8	1 3/4	24	12
24	32	1 3/4	24	10 1/2	33	1 7/8	24	12 3/4
26	34 1/2	1 3/4	28	11 1/2	36	1 7/8	28	13 1/4
30	39 1/4	2	28	13	40 1/4	2	28	14
34	43 1/2	2	28	13 3/4	44 1/2	2 1/4	28	15
36	46	2	32	14	47	2 1/2	28	15 3/4
42	52 3/4	2 1/2	32	16 1/4	53 3/4	2 3/4	28	17 1/2

Stud lengths for lap joint flanges are equal to lengths shown minus 1/2" plus the thickness of two laps of the stub ends.

BAR GRATING

STYLE	WEIGHT PER SQ. FT.
1 x 3/16 x 2 x 20 (Serrated & Plain)	7.1
1 x 3/16 x 3 x 20 (Serrated & Plain)	7.1
1 1/4 x 3/16 x 2 x 20 (Serrated & Plain)	9.0
1 1/4 x 3/16 x 3 x 20 (Serrated & Plain)	9.0
1 1/2 x 3/16 x 2 x 20 (Serrated & Plain)	10.6
1 1/2 x 3/16 x 3 x 20 (Serrated & Plain)	10.6

CONCRETE REINFORCING BARS

SIZE			WEIGHT PER FT.
3/8"	○	#3	.376
1/2"	○	#4	.668
5/8"	○	#5	1.043
3/4"	○	#6	1.502
7/8"	○	#7	2.044
1"	○	#8	2.670
1"	□	Equiv #9	3.400
1 1/8"	□	Equiv #10	4.303
1 1/4"	□	Equiv #11	5.313

ALUMINUM ANGLES 6061-T6

Size In Inches	Weight per Foot	Weight per 25'
1 x 1 x 1/8	.275	6.875
1 x 1 x 3/16	.400	10.00
1 x 1 x 1/4	.514	12.85
1 1/4 x 1 1/4 x 1/8	.343	8.575
1 1/4 x 1 1/4 x 3/16	.510	12.75
1 1/2 x 1 1/2 x 1/8	.423	10.58
1 1/2 x 1 1/2 x 3/16	.619	15.48
1 1/2 x 1 1/2 x 1/4	.809	20.23
1 3/4 x 1 3/4 x 1/8	.497	12.43
1 3/4 x 1 3/4 x 1/4	.950	23.75
2 x 2 x 1/8	.577	14.43
2 x 2 x 3/16	.850	21.25
2 x 2 x 1/4	1.110	27.75
2 x 2 x 3/8	1.606	40.15
2 1/2 x 2 1/2 x 3/16	1.070	26.75
2 1/2 x 2 1/2 x 1/4	1.404	35.10
2 1/2 x 2 1/2 x 3/8	2.050	51.25
3 x 3 x 3/16	1.290	32.25
3 x 3 x 1/4	1.684	42.10
3 x 3 x 3/8	2.474	61.85
3 x 3 x 1/2	3.230	80.75
4 x 4 x 1/4	2.283	57.08
4 x 4 x 3/8	3.366	84.15
6 x 6 x 3/8	5.120	128.00
1 1/2 x 1 x 3/16	.510	12.75
2 x 1 x 3/16	.630	15.75
2 x 1 1/2 x 1/8	.490	12.25
2 x 1 1/2 x 3/16	.730	18.25
2 x 1 1/2 x 1/4	.956	23.90
2 1/2 x 1 1/2 x 3/16	.850	21.25
2 1/2 x 1 1/2 x 1/4	1.110	27.75
2 1/2 x 2 x 3/16	.961	24.03
2 1/2 x 2 x 1/4	1.257	31.43
3 x 2 x 1/4	1.403	35.08
4 x 1 1/2 x 1/4	1.550	38.75
4 x 3 x 1/4	1.988	49.70
4 x 3 x 3/8	3.296	82.40
5 x 3 x 3/8	3.418	85.45

ALUMINUM CHANNELS 6061-T6

SIZE IN INCHES	WEB THICKNESS	WEIGHT PER FOOT	WEIGHT PER 25'
3 x 1.41	.170	1.417	35.43
3 x 1.498	.258	1.729	43.23
4 x 1.58	.180	1.846	46.15
4 x 1.647	.247	2.161	54.03
6 x 1.92	.200	2.826	70.65
6 x 1.945	.225	3.002	75.05
6 x 2.034	.314	3.631	90.77
8 x 2.296	.250	4.252	106.30
8 x 7.52	.487	6.484	156.00
10 x 2.60	.240	5.280	132.00

ALUMINUM ROUND BAR 6061-T6

SIZE IN INCHES	WEIGHT PER FOOT	WEIGHT PER 12'
1/4"	.058	.696
3/8"	.130	1.560
1/2"	.231	2.772
5/8"	.360	4.320
3/4"	.519	6.228
7/8"	.706	8.472
1"	.923	11.080
1 1/4"	1.400	17.280
1 3/8"	1.740	20.880
1 1/2"	2.080	24.960
1 3/4"	2.830	33.960
2"	3.690	44.280
2 1/4"	4.670	56.040
2 1/2"	5.770	69.240
3"	8.300	99.600
3 1/4"	9.750	117.000
3 1/2"	11.300	135.600
4"	14.760	RANDOM
4 1/2"	18.680	RANDOM
5"	23.060	RANDOM
5 1/2"	27.999	RANDOM
6"	33.210	RANDOM
6 1/2"	38.980	RANDOM

ALUMINUM FLAT BAR 6061-T6

SIZE IN INCHES			WEIGHT PER FOOT	WEIGHT PER 12'
1/8	x	1	.147	1.764
3/16	x	1	.220	2.640
3/16	x	1 1/2	.330	4.000
1/4	x	3/4	.220	2.640
1/4	x	1	.294	3.528
1/4	x	1 1/4	.367	4.404
1/4	x	1 1/2	.441	5.292
1/4	x	2	.587	7.004
1/4	x	2 1/2	.735	8.820
1/4	x	3	.881	10.570
1/4	x	4	1.174	13.090
1/4	x	6	1.770	21.240
5/16	x	1 1/2	.551	6.612
5/16	x	2	.734	8.810
3/8	x	1	.441	5.292
3/8	x	1 1/4	.551	6.612
3/8	x	1 1/2	.661	7.932
3/8	x	2	.881	10.570
3/8	x	2 1/2	1.100	13.200
3/8	x	3	1.320	15.840
3/8	x	4	1.760	21.120
3/8	x	5	2.200	26.400
3/8	x	6	2.640	31.680
1/2	x	1	.587	7.044
1/2	x	1 1/2	.881	10.570
1/2	x	2	1.170	14.040
1/2	x	2 1/2	1.470	17.640
1/2	x	3	1.760	21.120
1/2	x	4	2.350	28.200
1/2	x	6	3.520	42.240
1/2	x	8	4.700	56.400
5/8	x	2	1.470	17.640
3/4	x	1 1/2	1.320	15.840
3/4	x	2	1.760	21.120
3/4	x	3	2.640	31.680
3/4	x	4	3.520	42.240
1	x	6	7.050	84.600

ALUMINUM SHEET AND PLATE
3003 - H14

SIZE IN INCHES	WEIGHT/SQ. FT.	WEIGHT EA.
.040 x 48 x 120	.570	22.80
.050 x 48 x 144	.713	34.22
.063 x 48 x 96	.899	28.77
.063 x 48 x 120	.899	35.96
.063 x 48 x 144	.899	43.15
.080 x 48 x 120	1.140	45.60
.080 x 48 x 144	1.140	54.72
.090 x 48 x 120	1.280	51.20
.090 x 48 x 144	1.280	61.44
.100 x 48 x 144	1.430	68.64
.125 x 48 x 120	1.780	71.20
.125 x 48 x 144	1.780	85.44
.125 x 60 x 120	1.780	89.00
.125 x 60 x 144	1.780	106.80
.190 x 48 x 144	2.710	130.10
.190 x 60 x 144	2.710	162.60
.250 x 48 x 120	3.56	142.40
.250 x 48 x 144	3.56	170.90
.500 x 48 x 144	7.13	342.20

ALUMINUM SHEET AND PLATE 6061 - T6

SIZE IN INCHES	WEIGHT/SQ. FT.	WEIGHT EA.
.063 x 48 x 144	.890	42.72
.080 x 48 x 144	1.130	54.24
.090 x 48 x 144	1.270	60.96
.100 x 48 x 144	1.410	67.68
.125 x 36 x 96	1.760	42.24
.125 x 48 x 96	1.760	56.32
.125 x 48 x 144	1.760	84.48
.125 x 60 x 144	1.760	105.60
.190 x 48 x 144	2.680	128.60
.190 x 60 x 144	2.680	160.80
.250 x 36 x 96	3.530	84.72
.250 x 48 x 144	3.530	169.40
.250 x 60.5 x 120	3.530	178.71
.250 x 60 x 144	3.530	211.80
.250 x 72 x 144	3.530	254.20
.250 x 96 x 288.25	3.530	677.76
.313 x 48 x 144	4.420	212.20
.375 x 48 x 144	5.290	254.00
.375 x 60 x 160	5.290	352.67
.500 x 12 x 144	7.060	84.72
.500 x 14 x 144	7.060	98.84
.500 x 36 x 96	7.060	169.44
.500 x 48 x 144	7.060	338.90
.500 x 60 x 144	7.060	423.60
.500 x 96 x 288	7.060	1355.52
.625 x 48 x 144	8.820	423.40
.750 x 48 x 144	10.580	507.80
1.00 x 48 x 144	14.110	677.30
1.00 x 60 x 144	14.110	846.60
1.25 x 48 x 144	17.640	846.70
1.50 x 48 x 144	21.170	1016.00
1.75 x 48 x 144	24.700	1186.00
2.00 x 48 x 144	28.220	1355.00

ALUMINUM TREAD PLATE 6061

SIZE IN INCHES	WEIGHT/SQ. FT.	WEIGHT/SHEET
.125 x 48 x 192	2.00	128
60 x 192	2.00	160
.188 x 48 x 192	3.00	192
60 x 192	3.00	240
.250 x 48 x 192	3.90	250
60 x 192	3.90	312
.375 x 48 x 192	5.60	358
.125 x 60 x 120	3003 BRIGHT	100

SCHEDULE 40 SEAMLESS PIPE 6061-T6

NOMINAL PIPE SIZE	O.D. & WALL THICKNESS	WEIGHT PER 100 FT.
1/8	.405 x .068	8.5
1/4	.540 x .088	14.7
3/8	.675 x .091	19.6
1/2	.840 x .109	29.4
3/4	1.050 x .113	39.1
1	1.315 x .133	58.1
1 1/4	1.660 x .140	78.6
1 1/2	1.900 x .145	94.0
2	2.375 x .154	126.4
2 1/2	2.875 x .203	200.4
3	3.500 x .216	262.1
3 1/2	4.000 x .226	315.1
4	4.500 x .237	373.3
5	5.563 x .258	505.7
6	6.625 x .280	656.4
8	8.625 x .322	987.8
10	10.750 x .365	1400.0
12	12.750 x .375	1714.0

**ALUMINUM EXTRUDED SHAPES 6063-T52
SQUARE TUBING**

SIZE IN INCHES	LBS./FT.	WEIGHT/LENGTH
1 x 1 x .125	.526	11.09
1 1/4 x 1 1/4 x .125	.674	14.21
1 1/2 x 1 1/2 x .125	.826	17.41
2 x 2 x .125	1.126	23.74
3 x 3 x .125	1.708	36.00

**ALUMINUM EXTRUDED SHAPES 6063-T52
RECTANGULAR TUBING**

SIZE IN INCHES	LBS./FT.	WEIGHT/LENGTH
2 x 1 1/2 x .125	.953	20.09
3 x 1 3/4 x .125	1.350	28.46
4 x 1 3/4 x .125	1.650	34.79
3 x 2 x .125	1.412	29.76
5 x 2 x .125	2.026	42.71

**STAINLESS STEEL ANGLE
20' R/L**

SIZE IN INCHES	WT. PER FT.
1 x 1 x 1/8	.80
1 x 1 x 1/4	1.49
1 1/4 x 1 1/4 x 3/16	1.48
1 1/4 x 1 1/4 x 1/4	1.92
1 1/2 x 1 1/2 x 1/8	1.23
1 1/2 x 1 1/2 x 3/16	1.80
1 1/2 x 1 1/2 x 1/4	2.34
2 x 2 x 1/8	1.65
2 x 2 x 3/16	2.44
2 x 2 x 1/4	3.19
2 x 2 x 3/8	4.70
2 1/2 x 2 1/2 x 1/4	4.10
3 x 3 x 1/4	4.90
3 x 3 x 3/8	7.20
4 x 4 x 1/2	12.8

STAINLESS STEEL ROUNDS

ROUND SIZE in inches	WT./FT.	WT./12'
1/8	---	---
3/16	.094	1.130
1/4	.167	2.000
5/16	.261	3.132
3/8	.376	4.512
1/2	.668	8.016
9/16	.845	10.140
5/8	1.043	12.516
3/4	1.502	18.024
7/8	2.044	24.528
1	2.670	32.004
1 1/8	3.379	RANDOM
1 3/16	3.766	RANDOM
1 1/4	4.173	RANDOM
1 3/8	5.049	RANDOM
1 1/2	6.008	RANDOM
1 5/8	7.051	RANDOM
1 3/4	8.178	RANDOM
1 7/8	9.388	RANDOM
1 15/16	10.020	RANDOM
2	10.680	RANDOM
2 1/4	13.520	RANDOM
2 3/8	15.060	RANDOM
2 1/2	16.690	RANDOM
2 3/4	20.200	RANDOM
3	24.030	RANDOM
3 1/4	28.200	RANDOM
3 1/2	32.710	RANDOM
3 5/8	35.090	RANDOM
4	42.730	RANDOM
4 1/2	54.080	RANDOM
5	66.760	RANDOM
6	96.130	RANDOM

STAINLESS STEEL FLAT BAR

SIZE in inches	WT./FT.	WT./12'
1/8 x 3/4	.328	3.936
1/8 x 1	.437	5.244
1/8 x 1 1/2	.656	7.822
1/8 x 2	.888	10.656
3/16 x 1	.665	7.980
3/16 x 1 1/2	1.072	12.864
3/16 x 2	1.367	16.404
1/4 x 1	.904	10.848
1/4 x 1 1/4	1.194	14.328
1/4 x 1 1/2	1.382	16.584
1/4 x 2	1.886	22.632
1/4 x 3	2.730	32.760
1/4 x 4	3.700	44.400
3/8 x 1 1/2	2.040	24.480
3/8 x 2	2.750	33.000
3/8 x 2 1/2	3.420	41.040
3/8 x 3	4.220	50.640
3/8 x 3 1/2	4.300	51.600
3/8 x 4	5.533	66.396
1/2 x 1 1/2	2.720	32.640
1/2 x 2	3.570	42.840
1/2 x 3	5.294	63.528
1/2 x 4	7.220	86.640

STAINLESS STEEL SHEETS

SIZE	WT. PER SQ. FT.
10 GA.	5.67
11 GA.	5.05
12 GA.	4.5
14 GA.	3.15
16 GA.	2.50
18 GA.	2.00
20 GA.	1.50
22 GA.	1.25
24 GA.	1.00
26 GA.	.75

STAINLESS STEEL PLATES

SIZE	WT. PER SQ. FT.
3/16	8.579
1/4	11.162
5/16	13.746
3/8	16.496
1/2	21.633
5/8	26.831
3/4	32.123
7/8	37.291
1	42.665
1 1/8	47.833
1 1/4	53.001
1 3/8	58.169
1 1/2	63.337
1 3/4	73.672
2	84.008
2 1/4	94.777
2 1/2	105.113
2 3/4	115.449
3	126.301
3 1/2	146.972
4	168.264

Metric Conversion Factors English to Metric

Multiply	by	to obtain
Pounds (avoirdupois)	.45359	Kilograms
Net Tons (2000 Lbs)	.90718	Metric Tons
Gross Tons (2240 Lbs)	1.01605	Metric Tons
Inches	25.4001	Millimeters
Feet	.304801	Meters
Yards	.914402	Meters
Miles (statute)	1.60935	Kilometers
Square Inches	6.45163	Sq. Centimeters
Square Feet	.092903	Square Meters
Pounds per Lineal Ft.	1.48816	Kilograms per Lineal Meter
Pounds per Sq. Inch	.07031	Kilograms per Sq. Centimeter
Pounds per Sq. Ft.	4.88241	Kilograms per Sq. Meter
Pounds per Cubic Ft.	16.01837	Kilograms per Cubic Meter

Metric to English

Kilograms	2.20462	Pounds (avoirdupois)
* Metric Tons	1.10231	Net Tons (2000 Lbs)
* Metric Tons	.98421	Gross Tons (2240 Lbs)
Millimeters	.03937	Inches
Meters	3.280833	Feet
Meters	1.09361	Yards
Kilometers	.62137	Miles (statute)
Square Centimeters	.155	Square Inches
Square Meters	10.76387	Square Feet
Kilograms per Lineal Meter	.67197	Pounds per Lineal Ft.
Kilograms per Sq. Centimeter	14.2234	Pounds per Sq. Inch
Kilograms per Sq. Meter	.20482	Pounds per Sq. Ft.
Kilograms per Cubic Meter	.06243	Pounds per Cubic Ft.

NOTE: Length, width and cube denote meters
 Mass and weight denote grams
 Capacity denotes liters

* One Metric Ton - 2204.62 Lbs.

ABBREVIATIONS

Kilometer - km	Kilogram - kg
Meter - m	Gram - g or gm
Centimeter - cm	Centigram - cg
Millimeter - mm	Milligram - mg