



Surreway Group of Companies

CONVERSION BOOK

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Aluminum Checker Plate

Lbs per Sq. Ft.

1/8"	1.9
3/16"	2.8
1/4"	3.7
5/16"	5.5
3/8"	7.4

Aluminum Checker Plate

Lbs per Sq. Ft.

1/8"	1.9
3/16"	2.8
1/4"	3.7
5/16"	5.5
3/8"	7.4

Aluminum Plate

Lbs. Per Sq. Ft.

3/16"	2.641
1/4"	3.521
5/16"	4.409
3/8"	5.291
1/2"	7.048
5/8"	8.82
3/4"	10.6
1"	14.1

Aluminum Plate

Lbs. Per Sq. Ft.

1 1/4"	17.62
1 1/2"	21.15
2"	28.2
2 1/2"	35.3
3"	42.3
3 1/2"	49.4
4"	56.4

Aluminum Sheet

Lbs. Per Sq. Ft.

24 GA 0.282

22 GA 0.352

20 GA 0.451

18 GA 0.563

16 GA 0.718

14 GA 0.901

12 GA 1.141

11 GA 1.282

10 GA 1.762

Angles

		Lbs.	Lbs. Per
	Thickness	Per Ft	20 Ft.
1/2 X 1/2	1/8"	0.38	7.60
3/4 X 3/4	1/8"	0.59	11.80
1 X 1	1/8"	0.80	16.00
	3/16"	1.16	23.20
	1/4"	1.49	29.80
1 1/4 X 1 1/4	1/8"	1.01	20.20
	3/16"	1.48	29.60
1 1/2 X 1 1/2	1/4"	1.92	38.40
	1/8"	1.23	24.60
	3/16"	1.80	36.00
1 3/4 X 1 3/4	1/4"	2.34	46.80
	3/16"	2.12	42.40

Angles

	Thickness	Lbs. Per Ft.	Lbs. Per 20 Ft.
2x2	1/8"	1.65	33.00
	3/16"	2.44	48.80
	1/4"	3.19	63.80
	3/8"	4.70	94.00
2 1/2 X 2 1/2	3/16"	3.07	61.40
	1/4"	4.10	82.00
	3/8"	5.90	118.00
3x3	3/16"	3.71	74.20
	1/4"	4.90	98.00
	3/8"	7.20	144.00
	1/2"	9.40	376.00
3 1/2 X 3 1/2	1/4"	5.80	116.00

Angles

	Thickness	Lbs. Per Ft.	Lbs. Per 20 Ft.
4x4	5/16"	7.20	144.00
	3/8"	8.50	170.00
	1/2"	11.10	222.00
	1/4"	6.60	132.00
	5/16"	8.20	164.00
	3/8"	9.80	196.00
	1/2"	12.80	256.00
	5/8"	15.70	314.00
	3/4"	18.50	370.00
5x5	5/16"	10.30	206.00
	3/8"	12.30	246.00
	1/2"	16.20	324.00
	5/8"	20.00	400.00
	3/4"	23.60	472.00

Angles

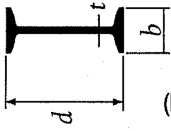
	Thickness	Lbs. Per Ft.	Lbs. Per 20 Ft.
6x6	5/16"	12.50	250.00
	3/8"	14.90	298.00
	1/2"	19.60	392.00
	5/8"	24.20	484.00
	3/4"	28.70	574.00
8x8	1/2"	26.40	528.00
	5/8"	32.70	654.00
	3/4"	38.90	778.00
	1"	51.00	1020.00

Uneven Angles

	Thickness	Lbs. Per Ft.	Lbs. Per 20 Ft
2 X 1 1/2	3/16"	2.12	42.40
	1/4"	2.77	55.40
3x2	3/16"	3.10	62.00
	1/4"	4.10	82.00
	3/8"	5.90	118.00
3 1/2 X 2 1/2	1/4"	4.90	98.00
	3/8"	7.20	144.00
4x3	1/4"	5.80	116.00
	3/8"	8.50	170.00
	1/2"	11.10	222.00
5x3	1/4"	6.60	132.00
	5/16"	8.20	164.00
	3/8"	9.80	196.00

Uneven Angles

	Thickness	Lbs.Per Ft.	Lbs.Per20 Ft.
5 X 3 1/2	5/16"	8.70	174.00
	3/8"	10.40	208.00
6x4	1/4"	8.30	166.00
	5/16"	10.30	206.00
	3/8"	12.30	246.00
	1/2"	16.20	324.00
7x4	5/8"	20.00	400.00
	3/8"	13.60	272.00
	1/2"	17.90	358.00
8x4	1/2"	19.60	392.00
	3/4"	28.70	574.00
8x6	1/2"	23.00	460.00
	3/4"	33.80	676.00



(Inches)

Channel

	Lbs.	Lbs.	Kg.Per	Depth	Width	Web
	PerFt.	Per20 Ft	Meter	(d)	(b)	(t)
		Ft	mm			
1 1/2@	1.13	22.60	38.00	1.69	1.500	0.500 0.125
2@	2.37	47.40	50.00	3.50	2.000	1.000 0.188
3@	4.10	82.00	75.00	6.00	3.000	1.410 0.170
	5	100.00	75.00	7.00	3.000	1.498 0.258
	6	120.00	75.00	9.00	3.000	1.596 0.356
4@	5.40	108.00	100.00	8.00	4.000	1.584 0.184
	6.25	125.00	100.00	9.00	4.000	1.647 0.247
	7.25	145.00	100.00	11.00	4.000	1.721 0.321

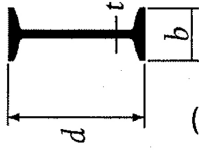
Channel

	Lbs.	Lbs.	Kg.Per	Depth	Width	Web	
	PerFt.	Per20 Ft	mm	Meter	(d)	(b)	(t)
5@	6.7	134.00	130.00	10.00	5.000	1.750	0.190
	9	180.00	130.00	13.00	5.000	1.885	0.325
6@	8.2	164.00	150.00	12.00	6.000	1.920	0.200
	10.5	210.00	150.00	16.00	6.000	2.034	0.314
	13	260.00	150.00	19.00	6.000	2.157	0.437
7@	9.8	196.00	180.00	15.00	7.000	2.090	0.210
	12	245.00	180.00	18.00	7.000	2.194	0.314
	14	295.00	180.00	22.00	7.000	2.300	0.419

Channel

		Lbs.	Lbs.	PerFt. Per20 Ft	mm	Meter	Kg.Per	Depth	Width	Web
								(d)	(b)	(t)
8@	11.5	11.50	230.00	200.00	200.00	17.00	17.00	8.000	2.260	0.220
	13	13	275.00	200.00	200.00	21.00	21.00	8.000	2.343	0.303
	18	18	375.00	200.00	200.00	28.00	28.00	8.000	2.527	0.487
9@	13.4	13.40	268.00	230.00	230.00	20.00	20.00	9.000	2.433	0.233
	15	15.00	300.00	230.00	230.00	22.00	22.00	9.000	2.485	0.285
	20	20.00	400.00	230.00	230.00	30.00	30.00	9.000	2.648	0.448
10@	15.3	15.30	306.00	250.00	250.00	23.00	23.00	10.000	2.600	0.240
	20	20.00	400.00	250.00	250.00	30.00	30.00	10.000	2.739	0.379
	25	25.00	500.00	250.00	250.00	37.00	37.00	10.000	2.886	0.526
	30	30.00	600.00	250.00	250.00	45.00	45.00	10.000	3.033	0.673

Channel



(Inches)

Lbs. Lbs. Kg.Per Depth Width Web
Per Ft. Per20 Ft mm Meter (d) (b) (t)

12@	20.7	20.70	414.00	310.00	31.00	12.000	2.942	0.282
	25	25.00	500.00	310.00	37.00	12.000	3.047	0.387
	30	30.00	600.00	310.00	45.00	12.000	3.170	0.510
15@	33.9	33.90	678.00	380.00	50.00	15.000	3.400	0.400
	40	40.00	800.00	380.00	60.00	15.000	3.520	0.520
	50	50.00	1000.00	380.00	74.00	15.000	3.716	0.716

Checker Plate

Lbs. Per Sq. Ft.

14 GA

3.75

1/8"

6.15

3/16"

8.70

1/4"

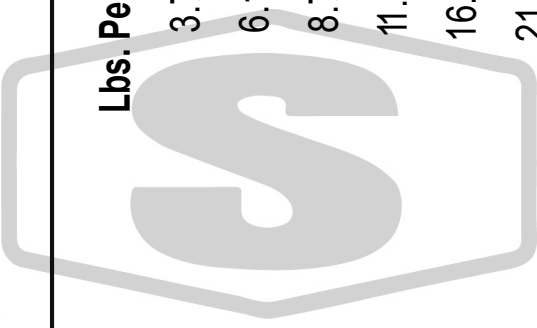
11.25

3/8"

16.35

1/2"

21.45



Expanded Metal
SWD = Short Way
Diamond

LWD = Long Way Diamond (Inches)

	Lbs. Per Sq. Ft.	SWD	LWD	Thickness
1/2 16F	0.82	0.50	1.25	16GA
1/2 13F	1.41	0.50	1.24	13GA
3/4 13F	0.63	0.92	2.08	13GA
3/4 9F	1.59	0.92	2.12	9GA
110F	1.66	1.00	2.50	10GA
112F	1.00	1.00	2.25	12GA
11/2 9F	1.13	1.33	3.20	9GA
1/2 13R	1.47	0.50	1.20	13GA
3/4 9R	1.81	0.92	2.00	9GA
110HR	2.25	1.00	2.30	10GA
11/2 1	2.00	1.41	3.00	10GA
OHR 3LB	3.00	1.25	3.50	3/16"
4 LB	4.00	1.25	4.00	1/4 "

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

1/8 x 1/2	0.21	4.20
1/8 x 3/4	0.32	6.40
1/8 x 1	0.43	8.60
1/8x1 1/4	0.53	10.60
1/8 x 1 1/2	0.64	12.80
1/8 x 2	0.85	17.00
1/8x2 1/2	1.06	21.20
1/8 x 3	1.28	25.60

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

1/8 x 4	1.70	34.00
1/8 x 5	2.13	42.60
1/8 x 6	2.55	51.00
3/16 x 1/2	0.32	6.40
3/16 x 3/4	0.48	9.60
3/16 x 1	0.64	12.80
3/16 x 1 1/4	0.80	16.00
3/16 x 1 1/2	0.96	19.20
3/16 x 2	1.28	25.60

Flat

	Lbs. Per Ft.	Lbs. Per 20 Ft
$1/8 \times 4$	1.70	34.00
$1/8 \times 5$	2.13	42.60
$1/8 \times 6$	2.55	51.00
$3/16 \times 1/2$	0.32	6.40
$3/16 \times 3/4$	0.48	9.60
$3/16 \times 1$	0.64	12.80
$3/16 \times 1 1/4$	0.80	16.00
$3/16 \times 1 1/2$	0.96	19.20
$3/16 \times 2$	1.28	25.60
$3/16 \times 2 1/2$	1.59	31.80
$3/16 \times 3$	1.91	38.20

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

$3/16 \times 4$	2.55	51.00
$3/16 \times 5$	3.19	63.80
$3/16 \times 6$	3.83	76.60
$1/4 \times 1/2$	0.43	8.60
$1/4 \times 3/4$	0.64	12.80
$1/4 \times 1$	0.85	17.00
$1/4 \times 1 \ 1/4$	1.01	20.20
$1/4 \times 1 \ 1/2$	1.28	25.60

Flat

	Lbs. Per Ft.	Lbs. Per 20 Ft
1/4 x 2	1.70	34.00
1/4x2 1/2	2.13	42.60
1/4 x 3	2.55	51.00
1/4 x 3 1/2	2.98	59.60
1/4 x 4	3.40	68.00
1/4 x 5	1.25	25.00
1/4 x 6	5.10	102.00
1/4 x 7	5.95	119.00
1/4 x 8	6. 80	136.00
3/8 x1	1.28	25.60
3/8x1 1/4	1. 59	31.80

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

3/8 x 1 1/2	1.91	38.20
3/8 x 2	2.55	51.00
3/8x2 1/2	3.19	63.80
3/8 x 3	3.83	76.60
3/8 x 3 1/2	4.46	89.20
3/8x4	5.10	102.00
3/8x5	6.38	127.60
3/8x6	7.65	153.00
3/8x7	8.93	178.60

Flat

Lbs. Per Ft Lbs. Per 20 Ft

3/8x 8 10.20 204.00

3/8 x 10 12.75 255.00

3/8 x 12 15.30 306.00

1/2 x 1 1.70 34.00

1/2x 1 1/2 2.55 51.00

1/2 x 2 3.40 68.00

1/2x 2 1/2 4.25 85.00

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

1/2 X 3	5.10	102.00
1/2 X 3 1/2	5.95	119.00
1/2 X 4	6.80	136.00
1/2 X 5	8.50	170.00
1/2 X 6	10.20	204.00
1/2 X 7	11.90	238.00
1/2 X 8	13.60	272.00
1/2 X 10	17.00	340.00
1/2 X 12	20.40	408.00
5/8 X 2	4.25	85.00
5/8 X 2 1/2	5.31	106.20
5/8 x 3	6.38	127.60
5/8 x 4	8.50	170.00
5/8 X 5	10.63	212.60

Flat

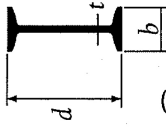
Lbs. Per Ft. Lbs. Per 20 Ft

5/8x6	12.75	255.00
5/8x8	17.00	340.00
3/4 X 2	5.10	102.00
3/4 X 2 1/2	6.38	127.60
3/4 X 3	7.65	153.00
3/4x4	10.20	204.00
3/4 X 5	12.75	255.00
3/4x6	15.30	306.00
3/4 X 7	17.85	357.00
3/4 x8	20.40	408.00
3/4 X 10	25.50	510.00
3/4 X 12	30.60	612.00
1x2	6.80	136.00

Flat

Lbs. Per Ft. Lbs. Per 20 Ft

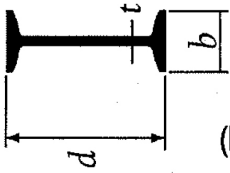
1x3	10.20	204.00
1x4	13.60	272.00
1x5	17.00	340.00
1 X 6	20.40	408.00
1 X 7	23.80	476.00
1x8	27.20	544.00
1 X 10	34.00	680.00
1 X 12	48.80	976.00



(Inches)

I Beam

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Web (t)
3@	5.70	114.00	75	8	3	2.330	0.170
	7.50	150.00	75	11	3	2.509	0.349
4@	7.70	154.00	100	11	4	2.663	0.193
	10.00	200.00	130	15	5	3.004	0.214
6@	12.50	250.00	150	19	6	3.332	0.232
	17.25	345.00	150	26	6	3.565	0.465
8@	18.40	368.00	200	27	8	4.001	0.271
	23.00	460.00	200	34	8	4.171	0.441



(Inches)

I Beam

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Web (t)
10@	25.4	508.00	250	38	10	4.661	0.311
	35	700.00	250	52	10	4.944	0.594
12@	31.8	636.00	310	47	12	5.000	0.350
	35	700.00	310	52	12	5.078	0.428

Pipe

	Lbs Per Ft.	Lbs Per 21 Ft.	External (Inches)	Internal (Inches)
1/8" sch 40"	0.24	5.04	0.405	0.269
1/4" sch 40"	0.42	8.82	0.540	0.364
3/8" sch 40"	0.57	11.97	0.67	0.493
1/2" sch 40"	0.85	17.85	0.840	0.622
3/4" sch 40"	1.13	23.73	1.050	0.824
1" sch 40"	1.68	35.28	1.315	1.049
1 1/4"sch40"	2.27	47.67	1.660	1.380
1 1/2"sch40"	2.72	57.12	1.900	1.610
2" sch 40"	3.65	76.65	2.375	2.067
2 1/2"sch40"	5.79	121.59	2.875	2.469
3" sch 40"	7.58	159.18	3.500	3.068
3 1/2"sch40"	9.11	191.31	4.000	3.548
4" sch 40"	10.79	226.59	4.500	4.026
5" sch 40"	14.62	307.02	5.563	5.047
6" sch 40"	18.97	398.37	6.625	6.065
8" sch 40"	28.55	599.55	8.625	7.981

Pipe

	Lbs Per Ft.	Lbs Per 21 Ft.	External (Inches)	Internal (Inches)
10" sch 40"	40.48	850.08	10.750	10.020
12" sch 40"	53.52	1123.92	12.750	11.938
3/8"sch 80"	0.74	15.54	0.675	0.423
1/2"sch 80"	1.09	22.89	0.840	0.546
3/4"sch 80"	1.47	30.87	1.050	0.742
1" sch 80"	2.17	45.57	1.315	0.957
1 1/4"sch80"	3.00	63.00	1.660	1.278
1 1/2"sch80"	3.63	76.23	1.900	1.500
2" sch 80"	4.78	100.38	2.375	1.939
2 1/2"sch80"	7.66	160.86	2.875	2.323

Pipe

	Lbs Per Ft.	Lbs Per 21 Ft.	External (Inches)	Internal (Inches)
3" sch 80"	10.25	215.25	3.500	2.900
3 1/2" sch 80"	12.51	262.71	4.000	3.364
4" sch 80"	14.98	314.58	4.500	3.826
5" sch 80"	20.78	436.38	5.563	4.813
6" sch 80"	28.57	599.97	6.625	5.761
8" sch 80"	43.39	911.19	8.625	7.625
1 O" sch 80"	54.74	1149.54	10.750	9.750
1/2" sch 160"	1.71	35.91	0.840	0.252
3/4" sch 160"	2.44	51.24	1.050	0.434
1" sch 160"	3.66	76.86	1.315	0.599
1 1/4" sch 160"	5.21	109.41	1.660	0.896
1 1/2" sch 160"	6.41	134.61	1.900	1.100
2" sch 160"	9.03	189.63	2.375	1.503
2 1/2" sch 160"	13.70	287.70	2.875	1.771
3" sch 160"	18.58	390.18	3.500	2.300
"3 1/2"" sch 160"	22.85	479.85	4.000	2.728
4" sch 160"	27.54	578.34	4.500	3.152
5" sch 160"	38.55	809.55	5.563	4.063
6" sch 160"	53.16	1116.36	6.625	4.897

Plate

Lbs Per Sq. Ft.

3/16"	7.650
1/4"	10.200
5/16	12.750
3/8"	15.300
7/16"	17.870
1/2"	20.400
9/16"	22.970
5/8"	25.500
3/4"	30.600
7/8"	35.730
1"	40.800
1 1/8"	45.900
1 1/4"	51.000
1 3/8"	56.100
1 1/2"	61.200
1 5/8"	66.300
1 3/4"	71.400

Plate

Lbs Per Sq. Ft.

2"	81.600
2 1/4"	91.890
2 1/2"	102.000
3"	122.400
3 1/2"	142.800
4"	163.200
4 1/2"	163.600
5"	204.000
5 1/2"	224.400
6"	244.800
7"	285.880
8"	326.720

Rounds

	Lbs Per Sq. Ft.	Lbs Per 20Sq. Ft.
3/16"	0.09	1.80
1/4"	0.17	3.40
5/16"	0.26	5.20
3/8"	0.38	7.60
7/16"	0.51	10.20
1/2"	0.67	13.40
9/16"	0.85	17.00
5/8"	1.04	20.80
3/4"	1.50	30.00
7/8"	2.04	40.80
1 "	2.67	53.40
1 1/8"	3.38	67.60
1 1/4"	4.17	83.40
1 3/8"	5.05	101.00

Rounds

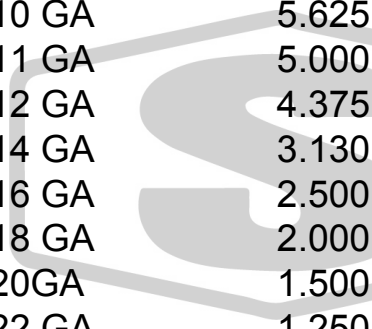
	Lbs Per Sq. Ft.	Lbs Per 20Sq. Ft.
1 1/2"	6.01	120.20
1 3/4"	8.18	163.60
2"	10.68	213.60
2 1/4"	13.52	270.40
2 1/2"	16.69	333.80
2 3/4"	20.19	403.80
3"	24.03	480.60
3 1/2"	32.71	654.20
4"	42.73	854.60
4 1/2"	54.08	1081.60
5 "	66.76	1335.20
5 1/2"	80.78	1615.60
6"	96.13	1922.60

Rounds

	Lbs Per Sq. Ft.	Lbs Per 20Sq. Ft.
6 1/2"	112.80	2256.00
7"	130.80	2616.00
7 1/2"	150.20	3004.00
8"	170.90	3418.00
8 1/2"	192.90	3858.00
9"	216.30	4326.00
9 1/2"	241.00	4820.00
10"	267.00	5340.00

Sheet

Lbs Per Sq. Ft.



10 GA	5.625
11 GA	5.000
12 GA	4.375
14 GA	3.130
16 GA	2.500
18 GA	2.000
20GA	1.500
22 GA	1.250
24GA	1.000

Square

	Lbs Per Sq. Ft.	Lbs Per 20Sq. Ft.
3/8"	0.48	9.60
1/2"	0.85	17.00
5/8"	1.33	26.60
3/4"	1.91	38.20
1"	3.40	68.00
1 1/4"	5.31	106.20
1 1/2"	7.65	153.00
2"	13.60	272.00
2 1/4"	17.21	344.20
2 1/2"	21.25	425.00
2 3/4"	25.71	514.20
3"	30.60	612.00
3 1/2"	41.65	833.00
4"	54.40	1088.00
4 1/2"	68.85	1377.00
5"	85.00	1700.00
6"	122.40	2448.00

Stainless Steel Plate

Lbs Per Sq. Ft.

3/16"	8.579
1/4 "	11.162
5/16"	13.746
3/8"	16.496
1/2"	21.663
5/8"	26.831
3/4"	32.123
7/8"	37.291
1 "	42.665
1 1/8"	47.703
1 1/4"	53.226
1 3/8"	58.549
1 1/2"	63.871
1 3/4"	74.516
2"	85.161
2 1/2"	106.452
3"	127.742

Stainless Steel Sheet

Lbs Per Sq. Ft.

24 GA	1.0500
22 GA	1.2600
20 GA	1.3100
18 GA	2.1000
16 GA	2.6250
14 GA	3.2813
12 GA	4.5925
11 GA	5.2500
10 GA	5.9050

Square Tubing

	Wall Thickness	Lbs Per Ft.
1/2 x 1/2	0.065	0.39
3/4 x 3/4	0.065	0.64
1 X 1	0.065	0.83
	0.100	1.14
	0.125	1.35
1 1/4 x 1 1/4	0.065	1.05
	0.100	1.48
	0.125	1.78
1 1/2 x 1 1/2	0.065	1.27
	0.100	1.82
	0.125	2.21
	0.188	3.35
2x2	0.065	1.09
	0.100	2.58
	0.125	3.06
	0.188	4.33
	0.250	5.41

Square Tubing

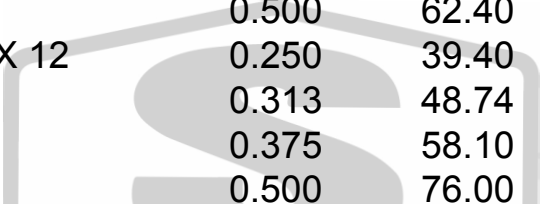
	Wall Thickness	Lbs Per Ft.
2 1/2 X 2 1/2	0.125	3.91
	0.188	5.61
	0.250	7.11
3x3	0.125	4.76
	0.188	6.89
	0.250	8.81
	0.313	10.27
	0.375	12.18
3 1/2 X 3 1/2	0.188	8.16
	0.250	10.50
	0.313	12.69
	0.375	14.29
4x4	0.125	6.44
	0.188	9.45
	0.250	12.20
	0.313	14.90
	0.375	17.30
	0.500	21.63

Square Tubing

	Wall Thickness	Lbs Per Ft.
5x5	0.188	12.00
	0.250	15.60
	0.313	19.10
	0.375	22.40
6x6	0.188	14.60
	0.250	19.00
	0.313	23.28
	0.375	27.50
7x7	0.188	17.13
	0.250	22.42
	0.313	27.52
	0.375	32.55
8x8	0.500	42.01
	0.250	25.80
	0.313	31.90
	0.375	37.70
	0.500	48.81

Square Tubing

	Wall Thickness	Lbs Per Ft.
10 X 10	0.250	32.60
	0.313	40.25
	0.375	47.90
	0.500	62.40
12 X 12	0.250	39.40
	0.313	48.74
	0.375	58.10
	0.500	76.00



Rectangular Tubing

	Wall Thickness	Lbs Per Ft.
2x1	0.065	1.22
	0.100	1.82
	0.125	2.21
3 X 1 1/2	0.125	3.47
	0.188	5.06
3x2	0.125	3.91
	0.188	5.61
	0.250	7.11
	0.313	8.15
3 1/2 X 2 1/2	0.125	4.74
	0.188	6.86
4x2	0.125	4.76
	0.188	6.89
	0.250	8.81
	0.313	10.27

Rectangular Tubing

	Wall Thickness	Lbs Per Ft.
4x3	0.188	8.17
	0.250	10.50
	0.313	12.69
	0.375	14.29
5x2	0.188	8.17
	0.250	10.50
	0.313	12.69
	0.375	14.29
5 X 2 1/2	0.188	8.68
	0.250	11.17
	0.313	13.46
	0.375	15.57
5x3	0.188	9.45
	0.250	12.20
	0.313	14.52
	0.375	17.30

Rectangular Tubing

	Wall Thickness	Lbs Per Ft.
6x2	0.188	9.45
	0.250	12.20
6x3	0.188	10.71
	0.250	13.91
6x4	0.375	19.39
	0.188	12.00
	0.250	15.60
	0.313	19.04
	0.375	22.40
7x5	0.438	25.47
	0.188	14.55
	0.250	19.00
	0.313	23.28
	0.375	27.45


Rectangular Tubing

	Wall Thickness	Lbs Per Ft.
8x2	0.125	8.14
	0.188	11.99
	0.250	15.60
	0.313	19.04
	0.375	22.35
8x4	0.188	14.60
	0.250	19.00
	0.313	23.28
	0.375	27.50
	0.500	42.05
8x6	0.188	17.10
	0.250	22.40
	0.313	27.52
	0.375	32.60
	0.500	42.05
8 1/2 X 2	0.188	12.70

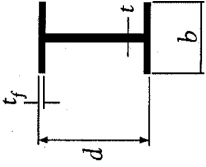
Rectangular Tubing

	Wall Thickness	Lbs Per Ft.
10 x6	0.188	17.11
	0.250	22.40
	0.313	27.52
	0.375	37.69
	0.500	48.81
12 X 8	0.250	32.60
	0.313	40.25
	0.375	47.85
	0.500	62.40

Round Tubing



	Lbs Per Ft.	Lbs Per 21 Ft.	External (Inches)	Internal (Inches)
3/4"	1.02	24.48	1.050	0.100
1"	1.30	31.20	1.315	0.100
1 1/4"	2.05	49.20	1.660	0.125
1 1/2"	2.38	57.12	1.900	0.125
2"	3.01	72.24	2.375	0.125



Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
4@	13	260	100	19	4.160	4.060	0.345	0.280
5@	16	320	130	24	5.010	5.000	0.360	0.240
	19	380	130	28	5.150	5.030	0.430	0.270
6@	9	180	150	14	5.900	3.940	0.215	0.170
	12	240	150	18	6.030	4.000	0.280	0.230
	15	300	150	22	5.990	5.990	0.260	0.230
	16	320	150	24	6.280	4.030	0.405	0.260
	20	400	150	30	6.200	6.020	0.365	0.260
	25	500	150	37	6.380	6.080	0.455	0.320

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
8@	10	200	200	15	7.890	3.940	0.205	0.170
	13	260	200	19	7.990	4.000	0.255	0.230
	14	280	200	21	7.980	5.210	0.250	0.195
	15	300	200	22	8.110	4.015	0.315	0.245
	18	360	200	27	8.140	5.250	0.330	0.230
	21	420	200	31	8.280	5.270	0.400	0.250
	24	480	200	36	7.930	6.495	0.400	0.245
	28	560	200	42	8.060	6.535	0.465	0.28

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
10@	12	240	250	18	9.870	3.960	0.210	0.190
	15	300	250	22	9.990	4.000	0.270	0.230
	17	340	250	25	10.110	4.010	0.330	0.240
	19	380	250	28	10.240	4.020	0.395	0.250
	22	440	250	33	10.170	5.750	0.360	0.240
	26	520	250	39	10.330	5.770	0.440	0.260
	30	600	250	45	10.470	5.810	0.510	0.300
	33	660	250	49	9.730	7.960	0.435	0.290
	39	780	250	58	9.920	7.985	0.530	0.315
	45	900	250	67	10.100	8.020	0.620	0.350
	49	980	250	73	9.980	10.000	0.560	0.340
	54	1080	250	80	10.090	10.030	0.615	0.370
	60	1200	250	89	10.220	10.080	0.680	0.420

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
68	68	1360	250	101	10.400	10.130	0.770	0.470
77	77	1540	250	114	10.600	10.090	0.870	0.530
88	88	1760	250	131	10.840	10.265	0.990	0.605
100	100	2000	250	148	11.100	10.340	1.120	0.680
112	112	2240	250	166	11.360	10.415	1.250	0.755
12@	14	280	310	21	11.910	3.970	0.225	0.200
16	16	320	310	24	11.990	3.990	0.265	0.220
12@	19	380	310	28	12.160	4.005	0.350	0.235
22	22	440	310	33	12.310	4.030	0.425	0.260
26	26	520	310	39	12.220	6.490	0.380	0.230
30	30	600	310	45	12.340	6.520	0.440	0.260
35	35	700	310	52	12.500	6.560	0.520	0.300
40	40	800	310	60	11.940	8.005	0.515	0.295
45	45	900	310	67	12.060	8.045	0.575	0.335

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
50	50	1000	310	74	12.190	8.080	0.640	0.370
53	53	1060	310	79	12.060	9.995	0.575	0.345
58	58	1160	310	86	12.190	10.010	0.640	0.360
65	65	1300	310	97	12.120	12.000	0.605	0.390
72	72	1440	310	107	12.250	12.040	0.670	0.430
79	79	1580	310	118	12.380	12.080	0.735	0.470
87	87	1740	310	129	12.530	12.125	0.810	0.515
96	96	1920	310	143	12.710	12.160	0.900	0.550
106	106	2120	310	158	12.890	12.220	0.990	0.610
120	120	2400	310	179	13.120	12.320	1.105	0.710
136	136	2720	310	207	13.410	12.400	1.250	0.790
14@	22	440	360	33	13.740	5.000	0.335	0.230
26	26	520	360	39	13.910	5.025	0.420	0.255
30	30	600	360	45	13.840	6.730	0.385	0.270

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
34	34	680	360	51	13.980	6.745	0.455	0.285
38	38	760	360	57	14.100	6.770	0.515	0.310
43	43	860	360	64	13.660	7.995	0.530	0.035
48	48	960	360	72	13.790	8.030	0.595	0.305
53	53	1060	360	79	13.920	8.060	0.660	0.370
14@ 61	61	1220	360	91	13.890	9.995	0.645	0.375
68	68	1360	360	101	14.040	10.035	0.720	0.415
74	74	1480	360	110	14.170	10.070	0.785	0.450
82	82	1640	360	122	14.310	10.130	0.855	0.510
90	90	1800	360	134	14.020	14.520	0.710	0.440
99	99	1980	360	147	14.160	14.565	0.780	0.485
109	109	2180	360	162	14.320	14.605	0.860	0.525

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	Lbs Per mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
16@	26	520	410	39	15.690	5.500	0.345	0.250
	31	620	410	46	15.880	5.525	0.440	0.275
	36	720	410	54	15.860	6.985	0.430	0.295
	40	800	410	60	16.010	6.995	0.505	0.305
	45	900	410	67	16.130	7.035	0.565	0.345
	50	1000	410	74	16.260	7.070	0.630	0.380
	57	1140	410	85	16.430	7.120	0.715	0.430
	67	1340	410	100	16.330	10.235	0.665	0.395
	77	1540	410	114	16.520	10.295	0.760	0.455
	89	1780	410	132	16.750	10.365	0.875	0.525
	100	2000	410	148	16.970	10.425	0.985	0.585

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	Lbs Per mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
18@	35	700	460	52	17.700	6.000	0.425	0.300
	40	800	460	60	17.900	6.015	0.525	0.315
	46	920	460	68	18.060	6.060	0.605	0.360
	50	1000	460	74	17.990	7.495	0.570	0.355
	55	1100	460	82	18.110	7.530	0.630	0.390
	60	1200	460	89	18.240	7.555	0.695	0.415
	65	1300	460	97	18.350	7.590	0.750	0.450
	71	1420	460	106	18.470	7.635	0.810	0.495
18@	76	1520	460	113	18.210	11.035	0.680	0.425
	86	1720	460	128	18.390	11.090	0.770	0.480
	97	1940	460	144	18.590	11.145	0.870	0.535
	106	2120	460	158	18.730	11.200	0.940	0.590
	119	2380	460	177	18.970	11.265	1.060	0.655

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	Lbs Per mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
21@	44	880	530	66	20.660	6.500	0.450	0.350
	50	1000	530	74	20.830	6.530	0.535	0.380
	57	1140	530	85	21.060	6.555	0.650	0.405
	62	1240	530	92	20.990	8.240	0.615	0.400
	68	1360	530	101	21.130	8.270	0.685	0.430
	73	1460	530	109	21.240	8.295	0.740	0.455
	83	1660	530	123	21.430	8.355	0.835	0.515
	101	2020	530	150	21.360	12.290	0.800	0.500
	111	2220	530	165	21.510	12.340	0.875	0.550
	132	2640	530	196	21.830	12.440	1.035	0.650
	147	2940	530	219	22.060	12.510	1.150	0.720

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	mm	Kg Per Meter	Depth (d)	Width (b)	Thick (tf)	Web (t)
24@	55	1100	610	82	23.570	7.005	0.505	0.395
	62	1240	610	92	23.740	7.040	0.590	0.430
	68	1360	610	101	23.730	8.965	0.585	0.415
	76	1520	610	113	23.920	8.990	0.680	0.440
	84	1680	610	125	24.100	9.020	0.770	0.470
	94	1880	610	140	24.310	9.065	0.875	0.515
	104	2080	610	155	24.060	12.750	0.750	0.500
	117	2340	610	174	24.260	12.800	0.850	0.550
	131	2620	610	195	24.480	12.855	0.960	0.605
	146	2920	610	217	24.740	12.900	1.090	0.650
30@	108	2160	760	161	29.830	10.475	0.760	0.545
	116	2320	760	173	30.010	10.495	0.850	0.565
	124	2480	760	185	30.170	10.515	0.930	0.585

Wide Flange

	Lbs Per Ft	Lbs Per 20 Ft	Kg Per Meter	Depth (d) mm	Width (b) mm	Thick (tf) mm	Web (t) mm
	132	2640	760 196	30.310	10.545	1.000	0.615
	173	3460	760 257	30.440	14.985	1.065	0.655
	191	3820	760 284	30.680	15.040	1.185	0.710
	211	4220	760 314	30.940	15.105	1.315	0.775
33@	118	2360	835 176	32.860	11.480	0.740	0.550
	130	2600	835 193	33.090	11.510	0.855	0.580
	201	4020	835 299	33.680	15.745	1.150	0.715
36@	135	2700	910 201	35.550	11.950	0.790	0.600
	150	3000	910 223	35.850	11.975	0.940	0.625

Gauge Chart

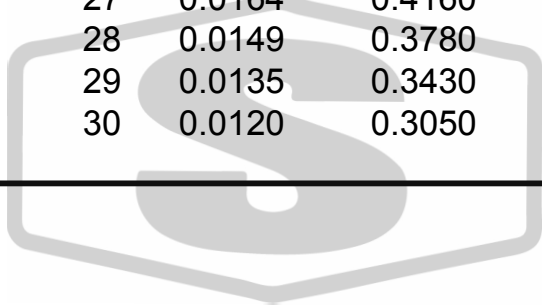
Gauge Number Inches Millimeter

3	0.2391	6.0730
4	0.2242	5.6940
5	0.2092	5.3130
6	0.1943	4.9350
7	0.1793	4.5540
8	0.1644	4.1750
9	0.1495	3.7970
10	0.1345	3.4160
11	0.1196	3.0380
12	0.1046	2.6560
13	0.0897	2.2780
14	0.0747	1.8970
15	0.0673	1.7090
16	0.0598	1.5180
17	0.0538	1.3660
18	0.0478	1.2140
19	0.0418	1.0610
20	0.0359	0.9110
21	0.0329	0.8350
22	0.0299	0.7590

Gauge Chart

Gauge Number	Inches	Millimeter
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23	0.0269	0.6830
24	0.0239	0.6070
25	0.0209	0.5310
26	0.0179	0.4540
27	0.0164	0.4160
28	0.0149	0.3780
29	0.0135	0.3430
30	0.0120	0.3050



Fraction Chart

Fractions in Inches Inches Millimeter

1/64"	0.0156	0.3962
1/32"	0.0312	0.7925
3/64"	0.0469	1.1913
1 /16"	0.0625	1.5875
5/64"	0.0781	1.9844
3/32"	0.0937	2.3799
7/64"	0.1093	2.7762
1/8"	0.1250	3.1750
9/64"	0.1406	3.5712
5/32"	0.1562	3.9675
11/64"	0.1719	4.3663
3/16"	0.1875	4.7625
13/64"	0.2031	5.1587
7/32"	0.2187	5.5549
15/64"	0.2344	5.5938
1/4"	0.2500	6.3500
17/64"	0.2656	6.7462
9/32"	0.2812	7.1425
19/64"	0.2969.	7.5412

Fraction Chart

Fractions in Inches Inches Millimeter

5/16"	0.3125	7.9375
21/64"	0.3281	8.3337
11/32"	0.3437	8.7299
23/64"	0.3594	9.1287
3/8"	0.3750	9.5250
25/64"	0.3906	9.9212
13/32"	0.4062	10.3174
27/64"	0.4219	10.7167
7/16"	0.4375	11.1125
29/64"	0.4531	11.5087
15/32"	0.4687	11.9049
31/64"	0.4844	12.3037
1/2"	0.5000	12.7000
33/64"	0.5156	13.0962
17/32"	0.5312	13.4925
35/64"	0.5469	13.8912
9/16"	0.5625	14.2875
37/64"	0.5781	14.6837
19/32"	0.5937	15.0799
39/64"	0.6094	15.4787

Fraction Chart

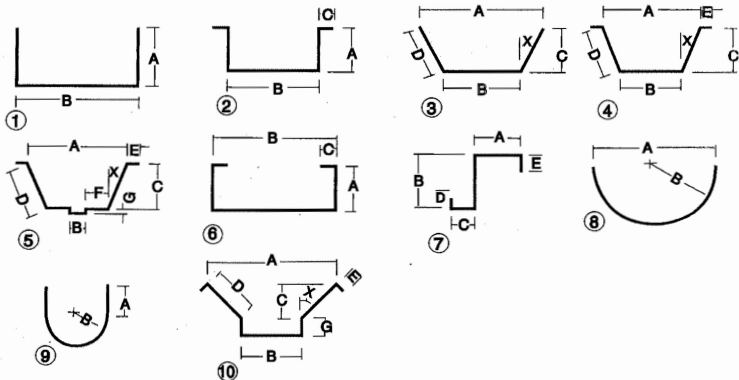
Fractions in Inches Inches Millimeter

5/8"	0.6250	15.8750
41/64"	0.6406	16.2712
21/32"	0.6562	16.6675
43/64"	0.6719	17.0662
11/16"	0.6875	17.4625
45/64"	0.7031	17.8587
23/32"	0.7187	18.2549
47/64"	0.7344	18.6538
3/4"	0.7500	19.0500
49/64"	0.7656	19.4462
25/32"	0.7812	19.8425
51/64"	0.7969	20.2413
3/16"	0.8125	20.6375
53/64"	0.8281	21.0337
27/32"	0.8437	21.4299
55/64"	0.8594	21.8287
7/8"	0.8750	22.2250
57/64"	0.8906	22.6212
29/32"	0.9062	23.0175

Metric Conversion

	Fractions in Inches	Inches	Millimeter
Length	mile	km	1.609347
	yard	m	0.9144
	foot	m	0.3048
	inch	mm	25.4
Area	square mile	km ²	2.59
	acre	m ²	4047
	acre	hectare	0.4047
	square yard	m ²	0.8361
	square foot	m ²	0.0929
	square inch	mm ²	645.2
Volume	acre foot	m ³	1233
	cubic yard	m ³	0.7646
	cubic foot	m ³	0.02832
	cubic foot	L (1000 cm ³)	28.32
	100 board feet	m ³	0.236
	gallon	L (1000 cm ³)	3.785
Mass	lb	kg	0.4536
	kip (1000 lb)	metric ton(1000kg)	0.4536

Forming Sketches



Rolled Rings

