



THEORETICAL WEIGHTS

WEIGHTS ARE FOR ESTIMATING PURPOSES ONLY !

**ALL WEIGHTS ARE THEORETICAL. THEY ARE COMPUTED ON THE BASIS
OF THE SPECIFIC GRAVITIES OF THE METALS INVOLVED !**

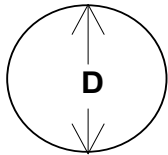
**THE WEIGHTS SHOWN WOULD BE ACCURATE IF STEEL COULD ALWAYS
BE PRODUCED TO EXACT SIZE. THIS IS SELDOM POSSIBLE IN
COMMERCIAL PRACTICE.**

**ACCURACY OF DIMENSIONS, PARTICULARLY OF HOT ROLLED STEEL
PRODUCTS, IS INFLUENCED BY MANY FACTORS, SUCH AS MILL DESIGN,
HEATING, PRACTICE, REDUCTION BETWEEN PASSES, ROLL WEAR, ROLL
PRESSURE, COMPOSITION OF STEEL, AND STANDARD TOLERANCES !**

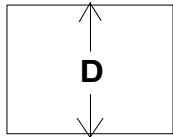


WEIGHT FORMULAS

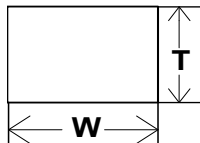
STEEL BARS WEIGHTS ARE BASED ON .2836 LBS. PER CUBIC INCH. ALUMINUM WEIGHTS ARE BASED ON .098 LBS. PER CUBIC INCH (1100 ALLOY). SEE NEXT PAGE FOR CONVERSION FACTORS FOR OTHER ALLOYS.



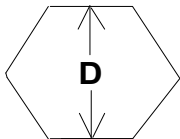
ROUND		D = SIZE IN INCHES	
STEEL	LBS. PER LINEAL FOOT	=	2.6729 X D X D
	LBS. PER LINEAL INCH	=	.22274 X D X D
ALUMINUM	LBS. PER LINEAL FOOT	=	.92400 X D X D



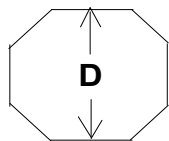
SQUARE		D = SIZE IN INCHES	
STEEL	LBS. PER LINEAL FOOT	=	3.4032 X D X D
	LBS. PER LINEAL INCH	=	.2836 X D X D
ALUMINUM	LBS. PER LINEAL FOOT	=	1.18 X D X D



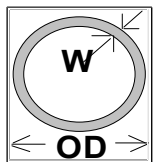
FLATS			
STEEL	LBS. PER LINEAL FOOT	=	3.4032 X T X W
	LBS. PER LINEAL INCH	=	.2836 X T X W
ALUMINUM	LBS. PER LINEAL FOOT	=	1.18 X T X W



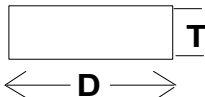
HEXAGON		D = SIZE IN INCHES	
STEEL	LBS. PER LINEAL FOOT	=	2.9473 X D X D
	LBS. PER LINEAL INCH	=	.2456 X D X D
ALUMINUM	LBS. PER LINEAL FOOT	=	1.02 X D X D



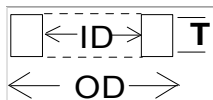
OCTAGONS		D = SIZE IN INCHES	
STEEL	LBS. PER LINEAL FOOT	=	2.8193 X D X D
	LBS. PER LINEAL INCH	=	.23494 X D X D
ALUMINUM	LBS. PER LINEAL FOOT	=	.9740 X D X D



TUBING		OD = INCHES W = INCHES	
STEEL	LBS. PER LINEAL FOOT	=	10.68 X (OD-W) X W
	LBS. PER LINEAL INCH	=	.890 X (OD-W) X W
ALUMINUM	LBS. PER LINEAL FOOT	=	3.70 X (OD-W) X W



CIRCLE		D = INCHES T = INCHES	
STEEL	.222274 X T X D X D		
ALUMINUM	.077 X T X D X D		



RINGS		OD = INCHES ID = INCHES T = INCHES	
STEEL	.222274 X T X (OD X OD - ID X ID)		
ALUMINUM	.0770 X T X (OD X OD - ID X ID)		



WEIGHT CONVERSION FACTORS

TO OBTAIN WEIGHT OF	DENSITY LBS. PER CUBIC INCH	MULTIPLY STEEL WEIGHT BY
ALUMINUM		
1100	0.098	0.346
2011	0.102	0.360
2014	0.101	0.357
2017	0.101	0.357
2024	0.101	0.357
3003	0.099	0.350
5005	0.098	0.346
5052	0.097	0.343
5056	0.095	0.336
5083	0.096	0.339
5086	0.096	0.339
6061	0.098	0.346
6063	0.097	0.343
7075	0.101	0.357
7178	0.102	0.360
STAINLESS		
300 SERIES	0.286	1.010
400 SERIES	0.283	1.000
NICKEL		
200	0.321	1.132
201	0.321	1.132
400	0.319	1.125
600	0.304	1.072
625	0.305	1.075
718	0.297	1.047
X750	0.298	1.051
800	0.287	1.012
800H	0.287	1.012
825	0.294	1.037
904L	0.291	1.026
MAGNESIUM	0.065	0.229
BERYLLIUM	0.067	0.236
TITANIUM	0.163	0.575
ZIRCONIUM	0.230	0.812
CAST IRON	0.258	0.911
ZINC	0.258	0.911
BRASS	0.307	1.084
COLOMBIUM	0.310	1.095
COPPER	0.324	1.144
MOLYBDENUM	0.369	1.303
SILVER	0.379	1.339
LEAD	0.410	1.448
TANTALUM	0.600	2.120
TUNGSTEN	0.697	2.462
GOLD	0.698	2.446

**THEORETICAL WEIGHTS-ROUNDS**

INCH SIZE	WEIGHT IN POUNDS		INCH SIZE	WEIGHT IN POUNDS	
	PER FOOT	PER INCH		PER FOOT	PER INCH
			3	24.060	2.0050
1/16	0.010	0.0009	1/16	25.069	2.0891
1/8	0.042	0.0035	1/8	26.103	2.1752
3/16	0.094	0.0078	3/16	27.157	2.2631
1/4	0.167	0.0139	1/4	28.233	2.3527
5/16	0.261	0.0218	5/16	29.329	2.4441
3/8	0.376	0.0313	3/8	30.446	2.5372
7/16	0.512	0.0426	7/16	31.584	2.6320
1/2	0.668	0.0557	1/2	32.743	2.7286
9/16	0.846	0.0705	9/16	33.923	2.8269
5/8	1.044	0.0870	5/8	35.124	2.9270
11/16	1.263	0.1053	11/16	36.345	3.0288
3/4	1.504	0.1253	3/4	37.588	3.1323
13/16	1.765	0.1470	13/16	38.851	3.2376
7/8	2.046	0.1705	7/8	40.135	3.3446
15/16	2.349	0.1958	15/16	41.440	3.4534
1	2.673	0.2228	4	42.770	3.5642
1/16	3.017	0.2515	1/16	44.113	3.6761
1/8	3.383	0.2819	1/8	45.481	3.7901
3/16	3.769	0.3141	3/16	46.870	3.9058
1/4	4.176	0.3480	1/4	48.279	4.0233
5/16	4.604	0.3837	5/16	49.710	4.1425
3/8	5.053	0.4211	3/8	51.161	4.2634
7/16	5.523	0.4603	7/16	52.633	4.3861
1/2	6.014	0.5012	1/2	54.126	4.5105
9/16	6.526	0.5438	9/16	55.640	4.6367
5/8	7.058	0.5882	5/8	57.175	4.7646
11/16	7.612	0.6343	11/16	58.731	4.8942
3/4	8.186	0.6821	3/4	60.307	5.0256
13/16	8.781	0.7317	13/16	61.905	5.1587
7/8	9.397	0.7831	7/8	63.523	5.2936
15/16	10.034	0.8362	15/16	65.162	5.4302
2	10.690	0.8908	5	66.820	5.5683
1/16	11.370	0.9475	1/16	68.504	5.7086
1/8	12.070	1.0058	1/8	70.205	5.8504
3/16	12.790	1.0659	3/16	71.928	5.9940
1/4	13.532	1.1276	1/4	73.672	6.1393
5/16	14.294	1.1911	5/16	75.436	6.2864
3/8	15.077	1.2564	3/8	77.222	6.4351
7/16	15.881	1.3234	7/16	79.028	6.5857
1/2	16.706	1.3921	1/2	80.855	6.7379
9/16	17.551	1.4626	9/16	82.703	6.8919
5/8	18.418	1.5348	5/8	84.572	7.0477
11/16	19.305	1.6088	11/16	86.462	7.2052
3/4	20.214	1.6845	3/4	88.373	7.3644
13/16	21.143	1.7619	13/16	90.304	7.5254
7/8	22.093	1.8411	7/8	92.257	7.6881
15/16	23.064	1.9220	15/16	94.230	7.8525

**THEORETICAL WEIGHTS-ROUNDS**

INCH SIZE	WEIGHT IN POUNDS		INCH SIZE	WEIGHT IN POUNDS	
	PER FOOT	PER INCH		PER FOOT	PER INCH
6	96.220	8.0183	9	216.500	18.0417
1/16	98.240	8.1866	1/16	219.522	18.2935
1/8	100.276	8.3563	1/8	222.561	18.5467
3/16	102.332	8.5277	3/16	225.620	18.8017
1/4	104.410	8.7008	1/4	228.700	19.0583
5/16	106.509	8.8757	5/16	231.801	19.3167
3/8	108.628	9.0524	3/8	234.923	19.5769
7/16	110.769	9.2307	7/16	238.066	19.8388
1/2	112.930	9.4108	1/2	241.229	20.1024
9/16	115.112	9.5927	9/16	244.414	20.3678
5/8	117.315	9.7763	5/8	247.619	20.6349
11/16	119.539	9.9616	11/16	250.845	20.9038
3/4	121.784	10.1487	3/4	254.093	21.1744
13/16	124.050	10.3375	13/16	257.361	21.4467
7/8	126.336	10.5280	7/8	260.650	21.7208
15/16	128.644	10.7203	15/16	263.959	21.9966
7	131.000	10.9167	10	267.300	22.2750
1/16	133.321	11.1101	1/16	270.642	22.5535
1/8	135.691	11.3076	1/8	274.014	22.8345
3/16	138.082	11.5069	3/16	277.407	23.1173
1/4	140.494	11.7079	1/4	280.822	23.4018
5/16	142.927	11.9106	5/16	284.257	23.6881
3/8	145.381	12.1151	3/8	287.713	23.9761
7/16	147.855	12.3213	7/16	291.189	24.2658
1/2	150.351	12.5292	1/2	294.687	24.5573
9/16	152.867	12.7389	9/16	298.206	24.8505
5/8	155.404	12.9503	5/8	301.745	25.1454
11/16	157.962	13.1635	11/16	305.306	25.4421
3/4	160.541	13.3784	3/4	308.887	25.7406
13/16	163.141	13.5951	13/16	312.489	26.0408
7/8	165.762	13.8135	7/8	316.112	26.3427
15/16	168.403	14.0336	15/16	319.756	26.6463
8	171.100	14.2583	11	323.400	26.9500
1/16	173.749	14.4791	1/16	327.107	27.2589
1/8	176.453	14.7044	1/8	330.813	27.5678
3/16	179.178	14.9315	3/16	334.541	27.8784
1/4	181.924	15.1604	1/4	338.289	28.1907
5/16	184.691	15.3909	5/16	342.058	28.5048
3/8	187.479	15.6232	3/8	345.848	28.8207
7/16	190.288	15.8573	7/16	349.659	29.1383
1/2	193.117	16.0931	1/2	353.491	29.4576
9/16	195.967	16.3306	9/16	357.344	29.7786
5/8	198.839	16.5699	5/8	361.217	30.1014
11/16	201.731	16.8109	11/16	365.112	30.4260
3/4	204.644	17.0537	3/4	369.027	30.7523
13/16	207.578	17.2982	13/16	372.964	31.0803
7/8	210.533	17.5444	7/8	376.921	31.4101
15/16	213.508	17.7924	15/16	380.899	31.7416

**THEORETICAL WEIGHTS-ROUNDS**

INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH	
12	384.900	32.0750	21	1179.000	98.2500
1/4	401.102	33.4252	1/4	1206.981	100.5818
1/2	417.641	34.8034	1/2	1235.548	102.9623
3/4	434.513	36.2094	3/4	1264.449	105.3707
13	451.700	37.6417	22	1294.000	107.8333
1/4	469.261	39.1051	1/4	1323.253	110.2710
1/2	487.136	40.5947	1/2	1353.156	112.7630
3/4	505.345	42.1121	3/4	1383.393	115.2827
14	523.888	43.6573	23	1413.964	117.8303
1/4	542.765	45.2304	1/4	1444.870	120.4058
1/2	561.977	46.8314	1/2	1476.109	123.0091
3/4	581.523	48.4603	3/4	1507.683	125.6402
15	601.400	50.1167	24	1539.590	128.2992
1/4	621.616	51.8014	1/4	1571.832	130.9860
1/2	642.164	53.5137	1/2	1604.408	133.7007
3/4	663.046	55.2539	3/4	1637.318	136.4432
16	684.260	57.0217	25	1670.563	139.2135
1/4	705.813	58.8177	1/4	1704.141	142.0117
1/2	727.697	60.6414	1/2	1738.053	144.8378
3/4	749.916	62.4930	3/4	1772.300	147.6916
17	772.500	64.3750	26	1806.880	150.5734
1/4	795.355	66.2796	1/4	1841.795	153.4829
1/2	818.576	68.2146	1/2	1877.044	156.4203
3/4	842.131	70.1775	3/4	1912.627	159.3856
18	866.000	72.1667	27	1948.544	162.3787
1/4	890.243	74.1869	1/4	1984.795	165.3996
1/2	914.800	76.2333	1/2	2021.381	168.4484
3/4	939.691	78.3076	3/4	2058.300	171.5250
19	964.900	80.4083	28	2095.554	174.6295
1/4	990.477	82.5397	1/4	2133.141	177.7618
1/2	1016.370	84.6975	1/2	2171.063	180.9219
3/4	1042.598	86.8832	3/4	2209.319	184.1099
20	1069.000	89.0833	29	2247.909	187.3257
1/4	1096.056	91.3380	1/4	2286.833	190.5694
1/2	1123.286	93.6072	1/2	2326.091	193.8409
3/4	1150.851	95.9042	3/4	2365.684	197.1403

**THEORETICAL WEIGHTS-SQUARES**

INCH SIZE	WEIGHT IN POUNDS		INCH SIZE	WEIGHT IN POUNDS	
	PER FOOT	PER INCH		PER FOOT	PER INCH
			3	30.629	2.552
1/8	0.053	0.0044	1/4	35.946	2.996
3/16	0.120	0.0100	1/2	41.689	3.474
1/4	0.213	0.0177	3/4	47.858	3.988
5/16	0.332	0.0277			
3/8	0.479	0.0399	4	54.451	4.538
7/16	0.651	0.0543	1/4	61.470	5.123
1/2	0.851	0.0709	1/2	68.915	5.743
9/16	1.077	0.0897	3/4	76.785	6.399
5/8	1.329	0.1108			
11/16	1.609	0.1340	5	85.080	7.090
3/4	1.914	0.1595	1/2	102.947	8.579
13/16	2.247	0.1872			
7/8	2.606	0.2171	6	122.515	10.210
15/16	2.991	0.2493			
			7	166.757	13.896
1	3.403	0.2836			
1/8	4.307	0.3589	8	217.805	18.150
3/16	4.799	0.3999			
1/4	5.318	0.4431	9	275.659	22.972
5/16	5.863	0.4885			
3/8	6.434	0.5362	10	340.320	28.360
7/16	7.032	0.5860			
1/2	7.657	0.6381	11	411.787	34.316
9/16	8.309	0.6924			
5/8	8.987	0.7489	12	490.061	40.838
11/16	9.691	0.8076			
3/4	10.422	0.8685	13	575.141	47.928
13/16	11.180	0.9317			
7/8	11.964	0.9970	14	667.027	55.586
15/16	12.775	1.0646			
			15	765.720	63.810
2	13.613	1.1344			
1/8	15.368	1.2806	16	871.219	72.602
3/16	16.285	1.3571			
1/4	17.229	1.4357	17	983.525	81.960
5/16	18.199	1.5166			
3/8	19.196	1.5997	18	1102.637	91.886
7/16	20.220	1.6850			
1/2	21.270	1.7725			
9/16	22.347	1.8622			
5/8	23.450	1.9542			
11/16	24.580	2.0483			
3/4	25.737	2.1447			
13/16	26.920	2.2433			
7/8	28.130	2.3441			
15/16	29.366	2.4472			

**THEORETICAL WEIGHTS-HEXAGONS**

INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH	
3/16	0.104	0.0086	3	26.526	2.2105
1/4	0.184	0.0154	1/4	31.131	2.5942
5/16	0.288	0.0240	1/2	36.104	3.0087
3/8	0.414	0.0345	3/4	41.446	3.4539
7/16	0.564	0.0470			
1/2	0.737	0.0614	4	47.157	3.9297
9/16	0.933	0.0777			
5/8	1.151	0.0959			
11/16	1.393	0.1161			
3/4	1.658	0.1382			
13/16	1.946	0.1621			
7/8	2.257	0.1880			
15/16	2.590	0.2159			
1	2.947	0.2456			
3/16	4.156	0.3463			
1/4	4.605	0.3838			
5/16	5.077	0.4231			
3/8	5.572	0.4644			
7/16	6.090	0.5075			
1/2	6.631	0.5526			
9/16	7.196	0.5996			
5/8	7.783	0.6486			
11/16	8.393	0.6994			
3/4	9.026	0.7522			
13/16	9.682	0.8069			
7/8	10.362	0.8635			
15/16	11.064	0.9220			
2	11.789	0.9824			
3/16	14.103	1.1753			
1/4	14.921	1.2434			
5/16	15.761	1.3134			
3/8	16.625	1.3854			
7/16	17.511	1.4593			
1/2	18.421	1.5351			
9/16	19.353	1.6128			
5/8	20.309	1.6924			
11/16	21.287	1.7739			
3/4	22.289	1.8574			
13/16	23.314	1.9428			
7/8	24.361	2.0301			
15/16	25.432	2.1193			

**THEORETICAL WEIGHTS-OCTAGONS**

INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH	
3/16	0.099	0.0083	3	25.374	2.1145
1/4	0.176	0.0147	1/4	29.779	2.4816
5/16	0.275	0.0229	1/2	34.536	2.8780
3/8	0.396	0.0330	3/4	39.646	3.3039
7/16	0.540	0.0450			
1/2	0.705	0.0587	4	45.109	3.7591
9/16	0.892	0.0743			
5/8	1.101	0.0918			
11/16	1.333	0.1110			
3/4	1.586	0.1322			
13/16	1.861	0.1551			
7/8	2.159	0.1799			
15/16	2.478	0.2065			
1	2.819	0.2349			
3/16	3.976	0.3313			
1/4	4.405	0.3671			
5/16	4.857	0.4047			
3/8	5.330	0.4442			
7/16	5.826	0.4855			
1/2	6.343	0.5286			
9/16	6.883	0.5736			
5/8	7.445	0.6204			
11/16	8.028	0.6690			
3/4	8.634	0.7195			
13/16	9.262	0.7718			
7/8	9.912	0.8260			
15/16	10.583	0.8819			
2	11.277	0.9398			
3/16	13.491	1.1242			
1/4	14.273	1.1894			
5/16	15.077	1.2564			
3/8	15.903	1.3252			
7/16	16.751	1.3959			
1/2	17.621	1.4684			
9/16	18.513	1.5427			
5/8	19.427	1.6189			
11/16	20.363	1.6969			
3/4	21.321	1.7767			
13/16	22.301	1.8584			
7/8	23.303	1.9419			
15/16	24.327	2.0273			

**THEORETICAL WEIGHTS-FLATS**

INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH	
1/16				1/8			
X	1/4	0.053	0.0044	X	2-1/2	1.064	0.0886
	3/8	0.080	0.0066		3	1.276	0.1064
	1/2	0.106	0.0089		3-1/2	1.489	0.1241
	5/8	0.133	0.0111		4	1.702	0.1418
	3/4	0.160	0.0133		4-1/2	1.914	0.1595
	7/8	0.186	0.0155		5	2.127	0.1773
	1	0.213	0.0177		6	2.552	0.2127
	1-1/8	0.239	0.0199		12	5.105	0.4254
	1-1/4	0.266	0.0222	1/4			
	1-1/2	0.319	0.0266	X	5/16	0.266	0.0222
	1-3/4	0.372	0.0310		3/8	0.319	0.0266
	2	0.425	0.0355		1/2	0.425	0.0355
	2-1/2	0.532	0.0443		9/16	0.479	0.0399
	3	0.638	0.0532		5/8	0.532	0.0443
					3/4	0.638	0.0532
3/32					7/8	0.744	0.0620
X	3/8	0.120	0.0100		1	0.851	0.0709
	1/2	0.159	0.0133		1-1/8	0.957	0.0798
	5/8	0.199	0.0166		1-1/4	1.064	0.0886
	3/4	0.239	0.0199		1-3/8	1.127	0.0939
	7/8	0.279	0.0233		1-1/2	1.276	0.1064
	1	0.319	0.0266		1-5/8	1.383	0.1152
	1-1/8	0.359	0.0299		1-3/4	1.489	0.1241
	1-1/4	0.399	0.0332		2	1.702	0.1418
	1-1/2	0.478	0.0399		2-1/4	1.914	0.1595
	1-3/4	0.558	0.0465		2-1/2	2.127	0.1773
	2	0.638	0.0531		2-3/4	2.340	0.1950
	2-1/2	0.797	0.0664		3	2.552	0.2127
	3	0.957	0.0797		3-1/4	2.765	0.2304
					3-1/2	2.978	0.2482
1/8					3-3/4	3.191	0.2659
X	3/16	0.080	0.0066		4	3.403	0.2836
	1/4	0.106	0.0089		4-1/2	3.829	0.3191
	5/16	0.133	0.0111		5	4.254	0.3545
	3/8	0.160	0.0133		5-1/2	4.679	0.3900
	1/2	0.213	0.0177		6	5.105	0.4254
	5/8	0.266	0.0222		7	5.956	0.4963
	3/4	0.319	0.0266		8	6.806	0.5672
	7/8	0.372	0.0310		10	8.508	0.7090
	1	0.425	0.0355		12	10.210	0.8508
	1-1/8	0.479	0.0399				
	1-1/4	0.532	0.0443				
	1-1/2	0.638	0.0532				
	1-3/4	0.744	0.0620				
	2	0.851	0.0709				
	2-1/4	0.957	0.0798				

**THEORETICAL WEIGHTS-FLATS**

INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH	
5/16				3/8			
X	3/8	0.399	0.0332	X	3-1/2	4.467	0.3722
	1/2	0.532	0.0443		4	5.105	0.4254
	5/8	0.665	0.0554		4-1/4	5.424	0.4520
	3/4	0.798	0.0665		4-1/2	5.743	0.4786
	7/8	0.931	0.0775		5	6.381	0.5318
	1	1.064	0.0886		5-1/2	7.019	0.5849
	1-1/8	1.196	0.0997		6	7.657	0.6381
	1-1/4	1.329	0.1108		8	10.210	0.8508
	1-3/8	1.462	0.1219		10	12.762	1.0635
	1-5/8	1.728	0.1440		12	15.314	1.2762
	1-3/4	1.861	0.1551				
	2	2.127	0.1773	7/16			
	2-1/4	2.393	0.1994	X	1/2	0.744	0.0620
	2-1/2	2.659	0.2216		5/8	0.931	0.0775
	3	3.191	0.2659		3/4	1.117	0.0931
	3-1/2	3.722	0.3102		7/8	1.303	0.1086
	4	4.254	0.3545		1	1.489	0.1241
	4-1/2	4.786	0.3988		1-1/4	1.861	0.1551
	5	5.318	0.4431		1-1/2	2.233	0.1861
	5-1/2	5.849	0.4874		1-3/4	2.606	0.2171
	6	6.381	0.5318		2	2.978	0.2482
	7	7.445	0.6204		2-1/4	3.350	0.2792
	8	8.508	0.7090		2-1/2	3.722	0.3102
	10	10.635	0.8863		3	4.467	0.3722
	12	12.762	1.0635		3-1/2	5.211	0.4343
					4	5.956	0.4963
3/8					5	7.445	0.6204
X	7/16	0.558	0.0465	1/2			
	1/2	0.638	0.0532	X	5/8	1.064	0.0886
	5/8	0.798	0.0665		3/4	1.276	0.1064
	3/4	0.957	0.0798		7/8	1.489	0.1241
	7/8	1.117	0.0931		1	1.702	0.1418
	1	1.276	0.1064		1-1/8	1.914	0.1595
	1-1/8	1.436	0.1196		1-1/4	2.127	0.1773
	1-1/4	1.595	0.1329		1-3/8	2.340	0.1950
	1-3/8	1.755	0.1462		1-1/2	2.552	0.2127
	1-1/2	1.914	0.1595		1-5/8	2.765	0.2304
	1-5/8	2.074	0.1728		1-3/4	2.978	0.2482
	1-3/4	2.233	0.1861		2	3.403	0.2836
	2	2.552	0.2127		2-1/4	3.829	0.3191
	2-1/4	2.871	0.2393		2-1/2	4.254	0.3545
	2-1/2	3.191	0.2659		2-3/4	4.679	0.3900
	2-3/4	3.510	0.2925		3	5.105	0.4254
	3	3.829	0.3191		3-1/4	5.530	0.4609
	3-1/4	4.148	0.3456		3-1/2	5.956	0.4963
	3-3/8	4.307	0.3589				

**THEORETICAL WEIGHTS-FLATS**

INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH	
1/2				3/4			
X	4	6.806	0.5672	X	2	5.105	0.4254
	4-1/4	7.232	0.6027		2-1/4	5.743	0.4786
	4-1/2	7.657	0.6381		2-1/2	6.381	0.5318
	5	8.508	0.7090		2-3/4	7.019	0.5849
	5-1/2	9.359	0.7799		3	7.657	0.6381
	6	10.210	0.8508		3-1/4	8.295	0.6913
	7	11.911	0.9926		3-1/2	8.933	0.7445
	8	13.613	1.1344		4-1/2	11.486	0.9572
	9	15.314	1.2762		5	12.762	1.0635
	10	17.016	1.4180		5-1/2	14.038	1.1699
	12	20.419	1.7016		6	15.314	1.2762
5/8					7	17.867	1.4889
X	3/4	1.595	0.1329		8	20.419	1.7016
	7/8	1.861	0.1551		9	22.972	1.9143
	1	2.127	0.1773		10	25.524	2.1270
	1-1/8	2.393	0.1994		12	30.629	2.5524
	1-1/4	2.659	0.2216	7/8			
	1-3/8	1.375	0.1146	X	1	2.978	0.2482
	1-1/2	3.191	0.2659		1-1/8	3.350	0.2792
	1-3/4	3.722	0.3102		1-1/4	3.722	0.3102
	2	4.254	0.3545		1-3/8	4.094	0.3412
	2-1/4	4.786	0.3988		1-1/2	4.467	0.3722
	2-1/2	5.318	0.4431		1-3/4	5.211	0.4343
	2-3/4	5.849	0.4874		2	5.956	0.4963
	3	6.381	0.5318		2-1/4	6.700	0.5583
	3-1/4	6.913	0.5761		2-1/2	7.445	0.6204
	3-1/2	7.445	0.6204		2-5/8	7.817	0.6514
	4	8.508	0.7090		2-3/4	8.189	0.6824
	4-1/4	9.040	0.7533		3	8.933	0.7445
	4-1/2	9.572	0.7976		3-1/2	10.422	0.8685
	5	10.635	0.8863		4	11.911	0.9926
	6	12.762	1.0635		4-3/4	14.145	1.1787
	7	14.889	1.2408		5	14.889	1.2408
	8	17.016	1.4180		6	17.867	1.4889
	12	25.524	2.1270		7	20.845	1.7371
3/4					8	23.822	1.9852
X	7/8	2.233	0.1861		12	35.734	2.9778
	1	2.552	0.2127	1			
	1-1/8	2.871	0.2393	X	1-1/8	3.829	0.3191
	1-1/4	3.191	0.2659		1-1/4	4.254	0.3545
	1-3/8	3.510	0.2925		1-3/8	4.679	0.3900
	1-1/2	3.829	0.3191		1-1/2	5.105	0.4254
	1-5/8	4.148	0.3456		1-3/4	5.956	0.4963
	1-3/4	4.467	0.3722		2	6.806	0.5672



THEORETICAL WEIGHTS-FLATS

INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE	WEIGHT IN POUNDS PER FOOT PER INCH	
1			1-1/2		
X 2-1/4	7.657	0.6381	X 1-3/4	8.933	0.7445
2-1/2	8.508	0.7090	2	10.210	0.8508
2-3/4	9.359	0.7799	2-1/4	11.486	0.9572
3	10.210	0.8508	2-1/2	12.762	1.0635
3-1/4	11.060	0.9217	2-3/4	14.038	1.1699
3-1/2	11.911	0.9926	3	15.314	1.2762
4	13.613	1.1344	3-1/2	17.867	1.4889
4-1/2	15.314	1.2762	4	20.419	1.7016
5	17.016	1.4180	4-1/2	22.972	1.9143
5-1/2	18.718	1.5598	5	25.524	2.1270
6	20.419	1.7016	5-1/2	28.076	2.3397
7	23.822	1.9852	6	30.629	2.5524
8	27.226	2.2688	7	35.734	2.9778
9	30.629	2.5524	8	40.838	3.4032
10	34.032	2.8360	10	51.048	4.2540
12	40.838	3.4032	12	61.258	5.1048
1-1/8			1-3/4		
X 2	7.657	0.6381	X 2	11.911	0.9926
3	11.486	0.9572	2-1/4	13.400	1.1167
4	15.314	1.2762	2-1/2	14.889	1.2408
4-1/2	17.229	1.4357	2-3/4	16.378	1.3648
5	19.143	1.5953	3	17.867	1.4889
6	22.972	1.9143	3-1/2	20.845	1.7371
8	30.629	2.5524	4	23.822	1.9852
			4-1/2	26.800	2.2334
1-1/4			5	29.778	2.4815
X 1-1/2	6.381	0.5318	6	35.734	2.9778
1-3/4	7.445	0.6204			
2	8.508	0.7090	2		
2-1/4	9.572	0.7976	X 2-1/4	15.314	1.2762
2-1/2	10.635	0.8863	2-1/2	17.016	1.4180
2-3/4	11.699	0.9749	2-3/4	18.718	1.5598
3	12.762	1.0635	3	20.419	1.7016
3-1/4	13.826	1.1521	3-1/2	23.822	1.9852
3-1/2	14.889	1.2408	4	27.226	2.2688
4	17.016	1.4180	4-1/2	30.629	2.5524
4-1/2	19.143	1.5953	5	34.032	2.8360
5	21.270	1.7725	6	40.838	3.4032
5-1/2	23.397	1.9498	7	47.645	3.9704
6	25.524	2.1270	8	54.451	4.5376
7	29.778	2.4815	10	68.064	5.6720
8	34.032	2.8360	12	81.677	6.8064
10	42.540	3.5450			
12	51.048	4.2540			



THEORETICAL WEIGHTS-FLATS

INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH		INCH SIZE		WEIGHT IN POUNDS PER FOOT PER INCH	
2-1/2				3			
X	2-3/4	23.397	1.9498	X	3-1/2	35.734	2.9778
	3	25.524	2.1270		4	40.838	3.4032
	3-1/2	29.778	2.4815		4-1/2	45.943	3.8286
	4	34.032	2.8360		5	51.048	4.2540
	4-1/2	38.286	3.1905		6	61.258	5.1048
	5	42.540	3.5450		7	71.467	5.9556
	6	51.048	4.2540		8	81.677	6.8064
	8	68.064	5.6720		10	102.096	8.5080
	9	76.572	6.3810				
	10	85.080	7.0900				
	12	102.096	8.5080				