

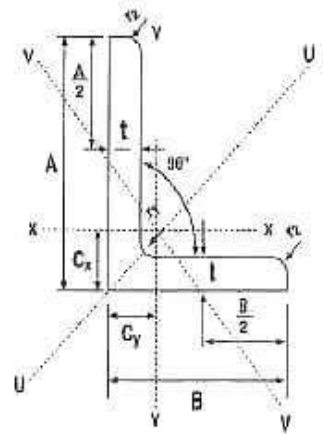
European Rolling Tolerances Standard - EN 10056-2 : 1993

This European standard specifies tolerances on shapes dimensions and mass of hot rolled structural steel equal and unequal leg angles.

Tolerances on shapes and dimensions Leg Length (A or B)

The deviation from nominal on length shall be within the tolerance given in the following table.
For unequal leg angles, the longer leg length (A) shall be used to determine the tolerance band.

Longer Leg Length A (mm)		Tolerance (mm)	
Up to and including 50	(A ≤ 50)	+ 1.0	- 1.0
Greater than 50 up to and including 100	(50 < A ≤ 100)	+ 2.0	- 2.0
Greater than 100 up to and including 150	(100 < A ≤ 150)	+ 3.0	- 3.0
Greater than 150 up to and including 200	(150 < A ≤ 200)	+ 4.0	- 4.0
Greater than 200	(A > 200)	+ 5.0	- 4.0



Section Thickness, t (mm)

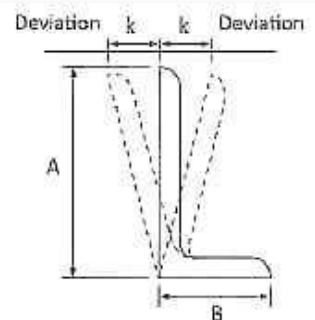
The deviation from nominal on thickness shall be within the tolerance given in the following table.

Section Thickness (t)		Tolerance (mm)	
Up to and including 5	(t ≤ 5)	+ 0.5	- 0.5
Greater than 5 up to and including 10	(5 < t ≤ 10)	+ 0.75	- 0.75
Greater than 10 up to and including 15	(10 < t ≤ 15)	+ 1.0	- 1.0
Greater than 15	(t > 15)	+ 1.20	- 1.20

Out Of Square, k (mm)

Out-of-squareness of the section shall not exceed the maximum following table. For unequal leg angles, the longer leg length (A) shall be used to determine the tolerance band.

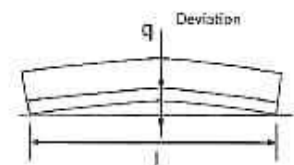
Out Of Square (k) - Longer Leg Length A (mm)		Tolerance (mm)
Up to and including 100	(A ≤ 100)	+ 1.0
Greater than 100 up to and including 150	(100 < A ≤ 150)	+ 1.5
Greater than 150 up to and including 200	(150 < A ≤ 200)	+ 2.0
Greater than 200	(A > 200)	+ 3.0



Straightness, q (mm)

The deviation from straightness shall not exceed the tolerances given in the following table.
For unequal leg angles, the longer leg length (A) shall be used to determine the tolerance band.

Longer Leg Length A (mm)		Tolerance		
		Over Full Bar Length	Over any Part Bar Length	
		Deviation q (mm)	length Considered, L (mm)	Deviation q (mm)
Up to and including 150	(A ≤ 150)	0.4% L	1,500	6.0
Up to and including 200	(A ≤ 200)	0.2% L	2,000	4.0
Greater than 200	(A > 200)	0.1% L	3,000	3.0



Tolerance On Mass

The deviation from the nominal mass of any individual piece shall not exceed :

- ± 6% for thickness for L ≤ 4mm or
- ± 4% for thickness for L > 4mm

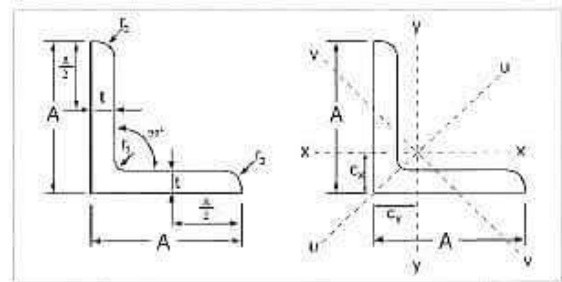
The deviation from the nominal mass is the difference between the actual mass of the piece and the calculated mass. The calculated mass shall be determined using a density of 7,850 kg/m³.

Tolerance On Length

The tolerance on ordered length shall be either :

- ± 50mm; or
- 0 / + 100mm where minimum lengths are requested

Dimensions and Properties

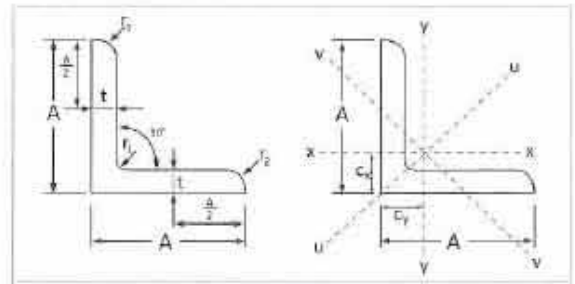


2a(i) Equal Angle

Designation Size	Unit Mass			Radius		Area Of Section	Distance Centre Of Gravity	Second Moment Of Area			Radius Of Gyration			Elastic Modulus
				Root	Toe			Axis	Axis	Axis	Axis	Axis	Axis	
A x A x t	M			r ₁	r ₂		C _x , C _y	x-x, y-y	u-u	v-v	x-x, y-y	u-u	v-v	x-x, y-y
mm x mm x mm	kg/m	kg/ft	lb/ft	mm	mm	cm ²	cm	cm ⁴	cm ⁴	cm ⁴	cm ²	cm ²	cm ²	cm ⁴
20 x 20 x 3	0.885	0.27	0.59	3.5	2.4	1.11	0.593	0.381	0.601	0.160	0.585	0.735	0.380	0.271
25 x 25 x 3	1.12	0.34	0.75	3.5	2.4	1.41	0.718	0.784	1.24	0.326	0.745	0.938	0.481	0.440
x 4	1.45	0.44	0.97	3.5	2.4	1.84	0.758	1.00	1.58	0.422	0.737	0.926	0.479	0.574
x 5	1.70	0.52	1.14	3.5	2.4	2.25	0.796	1.19	1.87	0.516	0.728	0.912	0.479	0.701
30 x 30 x 3	1.36	0.41	0.91	5	2.4	1.74	0.836	1.41	2.23	0.590	0.901	1.13	0.582	0.652
x 4	1.76	0.54	1.18	5	2.4	2.27	0.879	1.81	2.86	0.758	0.893	1.12	0.578	0.853
x 5	2.16	0.66	1.45	5	2.4	2.78	0.919	2.17	3.42	0.921	0.884	1.11	0.576	1.04
35 x 35 x 6	1.65	0.50	1.11	5	2.4	3.87	1.08	4.13	6.51	1.76	1.03	1.30	0.674	1.71
38 x 38 x 3	1.72	0.52	1.16	6	2.4	2.24	1.03	2.99	4.72	1.25	1.15	1.45	0.748	1.08
x 4	2.36	0.72	1.59	6	2.4	2.93	1.07	3.85	6.10	1.61	1.15	1.44	0.741	1.41
x 5	2.79	0.85	1.87	6	2.4	3.60	1.12	4.66	7.36	1.95	1.14	1.43	0.736	1.73
x 6	3.33	1.01	2.24	6	2.4	4.25	1.15	5.40	8.51	2.29	1.13	1.41	0.733	2.04
40 x 40 x 3	1.83	0.56	1.23	6	2.4	2.36	1.08	3.51	5.55	1.47	1.22	1.53	0.789	1.20
x 4	2.42	0.74	1.63	6	2.4	3.09	1.12	4.53	7.18	1.89	1.21	1.52	0.782	1.58
x 5	2.95	0.90	1.98	6	2.4	3.80	1.17	5.48	8.68	2.29	1.20	1.51	0.776	1.94
x 6	3.52	1.07	2.37	6	2.4	4.49	1.20	6.37	10.1	2.69	1.19	1.50	0.773	2.28
45 x 45 x 4	2.74	0.84	1.84	7	2.4	3.52	1.24	6.59	10.4	2.75	1.37	1.72	0.884	2.02
x 5	3.38	1.03	2.27	7	2.4	4.33	1.29	7.99	12.6	3.34	1.36	1.71	0.878	2.49
x 6	3.99	1.22	2.68	7	2.4	5.12	1.33	9.31	14.7	3.90	1.35	1.69	0.873	2.93
50 x 50 x 3	2.33	0.71	1.57	7	2.4	2.99	1.32	7.06	11.1	2.97	1.54	1.93	0.997	1.92
x 4	3.06	0.93	2.06	7	2.4	3.92	1.37	9.17	14.5	3.82	1.53	1.92	0.987	2.52
x 4.5	3.40	1.04	2.28	7	2.4	4.38	1.39	10.2	16.1	4.23	1.52	1.92	0.984	2.82
x 5	3.77	1.15	2.53	7	2.4	4.83	1.41	11.2	17.7	4.64	1.52	1.91	0.980	3.11
x 6	4.43	1.35	2.98	7	2.4	5.72	1.45	13.0	20.6	5.43	1.51	1.90	0.974	3.67
x 8	5.78	1.76	3.88	7	2.4	7.44	1.53	16.5	25.9	6.97	1.49	1.87	0.968	4.74
60 x 60 x 5	4.55	1.39	3.06	8	2.4	5.86	1.65	19.8	31.4	8.24	1.84	2.31	1.19	4.56
x 6	5.42	1.65	3.64	8	2.4	6.95	1.70	23.2	36.8	9.65	1.83	2.30	1.18	5.40
63 x 63 x 5	4.75	1.45	3.19	8	2.4	6.16	1.73	23.1	36.6	9.58	1.93	2.44	1.25	5.05
x 6	5.71	1.74	3.84	8	2.4	7.31	1.77	27.1	42.9	11.2	1.92	2.42	1.24	5.98
x 8	7.42	2.26	4.99	8	2.4	9.55	1.85	34.5	54.6	14.4	1.90	2.39	1.23	7.76
65 x 65 x 5	5.00	1.52	3.36	9	2.4	6.40	1.77	25.5	40.3	10.6	2.00	2.51	1.29	5.39
x 6	5.91	1.80	3.97	9	2.4	7.59	1.82	29.9	47.4	12.4	1.98	2.50	1.28	6.38
x 8	7.66	2.33	5.15	9	2.4	9.91	1.90	38.2	60.4	15.9	1.96	2.47	1.27	8.29
x 9	8.55	2.61	5.75	9	2.4	11.0	1.94	42.0	66.4	17.6	1.95	2.45	1.26	9.21
70 x 70 x 6	6.38	1.94	4.29	9	2.4	8.19	1.94	37.7	59.8	15.7	2.15	2.70	1.38	7.46
x 7	7.38	2.25	4.96	9	2.4	9.46	1.98	43.1	68.3	17.9	2.13	2.69	1.38	8.59
x 8	8.43	2.57	5.66	9	2.4	10.71	2.02	48.3	76.5	20.1	2.12	2.67	1.37	9.70
75 x 75 x 5	5.69	1.73	3.82	10	4.8	7.37	2.00	38.7	61.2	16.2	2.29	2.88	1.48	7.02
x 6	6.85	2.09	4.60	10	4.8	8.76	2.04	45.7	72.4	19.0	2.28	2.88	1.47	8.38
x 8	9.03	2.75	6.07	10	4.8	11.5	2.13	59.0	93.5	24.5	2.27	2.85	1.46	11.0
x 9	9.96	3.04	6.69	10	4.8	12.8	2.17	65.3	103	27.2	2.26	2.84	1.46	12.3
x 10	10.99	3.35	7.38	10	4.8	14.1	2.21	71.3	113	29.8	2.25	2.83	1.45	13.5
x 12	13.00	3.96	8.74	10	4.8	16.7	2.29	82.7	130	35.0	2.23	2.80	1.45	15.9
80 x 80 x 6	7.34	2.24	4.93	10	4.8	9.36	2.17	56.0	88.7	23.2	2.45	3.08	1.58	9.6
x 8	9.66	2.94	6.49	10	4.8	12.3	2.26	72.4	115	30.0	2.43	3.06	1.56	12.6
x 10	11.8	3.60	7.93	10	4.8	15.1	2.34	87.7	139	36.5	2.41	3.03	1.55	15.5

Note: Calculated based on 1 kg = 2.2046 lb and 1m = 3.2808 Feet

Dimensions and Properties

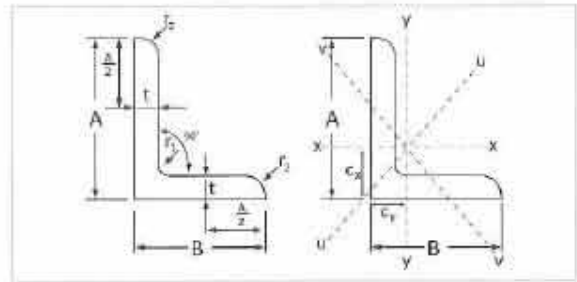


2 a) Equal Angle

Designation Size	Unit Mass			Radius		Area Of Section	Distance Centre Of Gravity	Second Moment Of Area			Radius Of Gyration			Elastic Modulus
				Root	Top			Axis	Axis	Axis	Axis	Axis	Axis	
A x A x t	M			r ₁	r ₂		C _x C _y	X-X, Y-Y	U-U	V-V	X-X, Y-Y	U-U	V-V	X-X, Y-Y
mm x mm x mm	kg/m	kg/ft	lb/ft	mm	mm	cm ²	cm	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm ³
90 x 90 x 6	8.30	2.53	5.58	11	4.8	10.6	2.41	81.0	128	33.7	2.76	3.48	1.78	12.3
x 7	9.61	2.93	6.46	11	4.8	12.3	2.46	93.2	148	38.7	2.76	3.47	1.77	14.3
x 8	10.90	3.32	7.32	11	4.8	13.9	2.50	105	167	43.5	2.75	3.46	1.77	16.2
x 9	12.20	3.72	8.20	11	4.8	15.6	2.54	117	185	48.2	2.74	3.45	1.76	18.0
x 10	13.40	4.08	9.00	11	4.8	17.2	2.58	128	202	52.9	2.73	3.43	1.76	19.9
x 12	15.90	4.85	10.68	11	4.8	20.3	2.66	149	235	62.1	2.70	3.40	1.75	23.5
x 13	17.00	5.18	11.42	11	4.8	21.9	2.70	159	251	66.6	2.69	3.39	1.74	25.2
100 x 100 x 6	9.20	2.80	6.18	12	4.8	11.9	2.65	113	178	47.0	3.08	3.88	1.99	15.3
x 7	10.70	3.26	7.19	12	4.8	13.7	2.70	130	206	53.9	3.08	3.87	1.98	17.8
x 8	12.20	3.72	8.20	12	4.8	15.6	2.75	146	232	60.6	3.07	3.86	1.97	20.2
x 10	15.00	4.57	10.08	12	4.8	19.2	2.83	178	283	73.8	3.05	3.84	1.96	24.8
x 12	17.80	5.43	11.96	12	4.8	22.8	2.91	208	330	86.5	3.02	3.81	1.95	29.4
x 13	19.10	5.82	12.83	12	4.8	24.5	2.95	222	352	92.8	3.01	3.79	1.95	31.5
x 15	21.90	6.68	14.72	12	4.8	28.0	3.02	250	395	105	2.99	3.76	1.94	35.8
120 x 120 x 8	14.70	4.48	9.88	13	4.8	18.8	3.24	259	411	107	3.71	4.67	2.38	29.5
x 10	18.20	5.55	12.23	13	4.8	23.3	3.32	316	502	130	3.69	4.64	2.37	36.4
x 12	21.60	6.58	14.51	13	4.8	27.6	3.41	371	588	153	3.66	4.62	2.36	43.1
x 15	26.60	8.11	17.87	13	4.8	34.0	3.52	448	710	186	3.63	4.57	2.34	52.8
125 x 125 x 8	14.90	4.54	10.01	14	4.8	19.7	3.36	294	466	122	3.87	4.87	2.49	32.2
x 10	19.09	5.82	12.83	14	4.8	24.3	3.44	360	570	149	3.84	4.84	2.47	39.7
x 12	22.67	6.91	15.23	14	4.8	28.9	3.53	422	669	174	3.82	4.81	2.46	47.0
130 x 130 x 8	15.90	4.85	10.68	14	4.8	20.5	3.48	332	527	138	4.03	5.07	2.59	34.9
x 9	17.90	5.46	12.03	14	4.8	22.9	3.53	370	586	153	4.02	5.06	2.58	39.0
x 10	19.70	6.00	13.24	14	4.8	25.3	3.57	406	645	168	4.01	5.05	2.57	43.1
x 12	23.50	7.16	15.79	14	4.8	30.1	3.65	477	758	197	3.98	5.02	2.56	51.1
x 15	28.80	8.78	19.35	14	4.8	37.1	3.77	578	916	240	3.95	4.97	2.54	62.6
x 16	30.70	9.36	20.63	14	4.8	39.4	3.81	610	966	253	3.94	4.95	2.54	66.3
150 x 150 x 8	18.00	5.49	12.10	16	4.8	23.8	3.97	518	820	215	4.66	5.87	3.01	46.9
x 10	23.00	7.01	15.46	16	4.8	29.5	4.06	635	1008	263	4.64	5.85	2.99	58.0
x 12	27.30	8.32	18.34	16	4.8	35.0	4.14	748	1187	309	4.62	5.82	2.97	68.9
x 15	33.80	10.30	22.71	16	4.8	43.2	4.26	909	1442	375	4.59	5.78	2.95	84.6
x 16	35.70	10.88	23.99	16	4.8	45.9	4.30	960	1523	397	4.57	5.76	2.94	89.8
x 18	40.10	12.22	26.95	16	4.8	51.2	4.38	1060	1680	440	4.55	5.73	2.93	99.8
x 19	41.90	12.77	28.16	16	4.8	53.8	4.42	1109	1756	462	4.54	5.71	2.93	105
175 x 175 x 12	31.80	9.69	21.37	16	4.8	41.0	4.77	1208	1920	497	5.43	6.84	3.48	94.9
x 15	39.40	12.01	26.48	16	4.8	50.7	4.89	1474	2342	606	5.39	6.80	3.46	117
200 x 200 x 12	36.55	11.14	24.56	18	4.8	47.2	5.38	1829	2906	753	6.23	7.85	4.00	125
x 13	39.49	12.04	26.54	18	4.8	50.9	5.42	1967	3126	809	6.22	7.84	3.99	135
x 15	45.30	13.81	30.44	18	4.8	58.3	5.50	2237	3555	919	6.19	7.81	3.97	154
x 16	48.50	14.78	32.59	18	4.8	62.0	5.54	2369	3765	973	6.18	7.79	3.96	164
x 18	54.20	16.52	36.42	18	4.8	69.4	5.62	2627	4174	1080	6.15	7.76	3.95	183
x 20	59.90	18.26	40.25	18	4.8	76.6	5.70	2877	4569	1185	6.13	7.72	3.93	201
x 24	71.10	21.67	47.78	18	4.8	90.8	5.85	3357	5322	1391	6.08	7.65	3.91	237
x 25	73.60	22.43	49.46	18	4.8	94.3	5.89	3472	5502	1442	6.07	7.64	3.91	246
x 26	76.80	23.41	51.61	18	4.8	97.8	5.93	3586	5680	1492	6.05	7.62	3.91	255
250 x 250 x 25	93.70	28.56	62.96	20	4.8	120	7.14	7030	11170	2891	7.67	9.67	4.92	394
x 28	104.00	31.70	69.88	20	4.8	133	7.25	7741	12290	3195	7.63	9.61	4.90	436
x 32	118.00	35.97	79.29	20	4.8	151	7.40	8650	13710	3593	7.58	9.54	4.89	491
x 35	128.00	39.01	86.01	20	4.8	164	7.51	9305	14720	3887	7.54	9.49	4.88	532
300 x 300 x 35	155.00	47.24	104.16	24	18	197	8.71	16300	25900	6690	9.09	11.50	5.82	766
350 x 350 x 35	182.00	55.47	122.30	24	18	232	9.96	26600	42300	10800	10.70	13.50	6.83	1060

Note: Calculated based on 1 kg = 2.2046 lb and 1 m = 3.2808 Feet

Dimensions and Properties



2 a (ii) Unequal Angle

Designation Size	Unit Mass			Radius		Area Of Section	Distance Centre Of Gravity		Second Moment Of Area				Radius of Gyration				Elastic Modulus		Angle to U-U
				Root	Toe				Axis X-X	Axis Y-Y	Axis U-U	Axis V-V	Axis X-X	Axis Y-Y	Axis U-U	Axis V-V			
	A x B x t	M		r ₁	r ₂		C _x	C _y	cm ⁴	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm	cm ²	cm ²	
mm x mm x mm	kg/m	kg/ft	lb/ft	mm	mm	cm ²	cm	cm	cm ⁴	cm ⁴	cm ⁴	cm ⁴	cm	cm	cm	cm	cm ²	cm ²	Axis
63 x 38 x 4.5 x 6	3.45	1.05	2.32	6	2.4	4.4	2.10	0.870	18.0	4.90	20.0	3.00	2.01	1.06	2.12	0.820	4.20	1.68	0.362
	4.43	1.35	2.98	6	2.4	5.75	2.17	0.930	23.0	6.30	25.0	3.80	1.99	1.04	2.10	0.820	5.50	2.18	0.358
75 x 50 x 6 x 8	5.65	1.72	3.80	7	2.4	7.22	2.45	1.21	40.9	14.6	47.1	8.48	2.38	1.42	2.55	1.08	8.10	3.87	0.436
	7.39	2.25	4.97	7	2.4	9.44	2.53	1.29	52.4	18.6	60.1	10.9	2.36	1.40	2.52	1.07	10.5	5.01	0.430
100 x 65 x 7 x 8 x 9 x 10 x 12	8.8	2.68	5.91	10	4.8	11.2	3.23	1.52	113	37.7	128	22.1	3.18	1.84	3.39	1.41	16.7	7.56	0.415
	9.4	2.87	6.32	10	4.8	12.7	3.28	1.56	127	42.3	144	24.9	3.17	1.83	3.38	1.40	18.9	8.57	0.414
	11.0	3.35	7.39	10	7.0	14.0	3.31	1.58	138	45.5	157	26.8	3.14	1.80	3.34	1.38	20.6	9.26	0.410
	12.3	3.75	8.27	10	4.8	15.6	3.36	1.64	154	51.1	175	30.2	3.14	1.81	3.35	1.39	23.2	10.5	0.410
	14.4	4.39	9.68	10	7.0	18.4	3.43	1.70	177	58.0	201	34.7	3.11	1.78	3.30	1.37	27.0	12.1	0.404
100 x 75 x 7 x 8 x 9 x 10 x 12 x 13	9.3	2.83	6.25	10	5.0	11.9	3.06	1.84	118	56.9	144	30.7	3.15	2.19	3.49	1.61	17.0	10.1	0.548
	10.6	3.23	7.12	10	4.8	13.5	3.11	1.88	133	64.2	163	34.6	3.14	2.18	3.48	1.60	19.3	11.4	0.548
	11.8	3.60	7.93	10	4.8	15.1	3.15	1.92	148	71.1	181	38.4	3.13	2.17	3.46	1.60	21.6	12.7	0.546
	13.0	3.96	8.74	10	4.8	16.6	3.19	1.96	162	77.7	198	42.2	3.12	2.16	3.45	1.59	23.8	14.0	0.545
	15.4	4.69	10.35	10	4.8	19.7	3.27	2.03	189	90.3	230	49.5	3.10	2.14	3.42	1.59	28.1	16.5	0.541
	16.5	5.03	11.09	10	4.8	21.2	3.31	2.07	202	96.3	245	53.1	3.09	2.13	3.40	1.58	30.2	17.7	0.539
125 x 75 x 6.5 x 7 x 8 x 9 x 10 x 12 x 13	10.0	3.05	6.72	11	4.8	12.7	4.07	1.62	206	56.6	228	34.4	4.02	2.11	4.23	1.64	24.4	9.63	0.360
	10.7	3.26	7.19	11	4.8	13.7	4.10	1.64	220	60.5	244	36.7	4.01	2.10	4.22	1.64	26.2	10.3	0.360
	12.2	3.72	8.20	11	4.8	15.5	4.14	1.69	249	68.1	275	41.3	4.00	2.10	4.21	1.63	29.7	11.7	0.360
	13.5	4.11	9.07	11	4.8	17.4	4.19	1.73	276	75.5	306	45.8	3.99	2.09	4.20	1.62	33.2	13.1	0.359
	15.0	4.57	10.08	11	4.8	19.2	4.23	1.77	303	82.6	336	50.2	3.98	2.08	4.18	1.62	36.7	14.4	0.358
	17.8	5.43	11.96	11	4.8	22.7	4.32	1.84	355	96.0	392	58.8	3.95	2.06	4.16	1.61	43.4	17.0	0.354
	19.1	5.82	12.83	10	7.0	24.3	4.35	1.87	376	101	414	61.9	3.93	2.04	4.13	1.60	46.1	17.9	0.352
150 x 75 x 7 x 8 x 9 x 10 x 12 x 15	12.1	3.69	8.13	12	5.0	15.5	5.17	1.50	364	63.1	386	40.8	4.85	2.02	5.00	1.62	37.0	10.5	0.263
	13.8	4.21	9.27	11	4.8	17.5	5.23	1.54	411	71.2	436	45.8	4.84	2.02	4.99	1.62	42.1	11.9	0.263
	15.3	4.66	10.28	12	8.5	19.4	5.25	1.55	447	75.3	473	48.7	4.79	1.97	4.93	1.58	45.8	12.7	0.259
	17.0	5.18	11.42	11	4.8	21.7	5.32	1.62	503	86.3	533	55.8	4.82	2.00	4.96	1.60	52.0	14.7	0.261
	20.2	6.16	13.57	11	4.8	25.7	5.41	1.70	591	100	626	65.3	4.79	1.98	4.93	1.59	61.6	17.3	0.259
	24.8	7.56	16.66	11	4.8	31.7	5.53	1.81	715	120	756	79.2	4.75	1.95	4.89	1.58	75.5	21.1	0.254
150 x 90 x 8 x 9 x 10 x 12 x 15	14.3	4.36	9.61	10	5.0	18.7	4.93	1.97	436	121	484	72.7	4.83	2.54	5.09	1.97	43.3	17.2	0.364
	16.4	5.00	11.02	12	6.0	20.9	4.95	2.00	485	133	537	80.5	4.81	2.52	5.06	1.96	48.2	19.0	0.361
	18.2	5.55	12.23	12	4.8	23.2	5.00	2.04	536	147	595	89.2	4.81	2.52	5.06	1.96	53.7	21.2	0.361
	21.6	6.58	14.51	12	4.8	27.6	5.09	2.12	630	172	698	105	4.78	2.50	5.03	1.95	63.6	25.0	0.359
	26.6	8.11	17.87	12	4.8	34.0	5.21	2.24	764	207	844	127	4.74	2.47	4.99	1.93	78.1	30.6	0.354
150 x 100 x 8 x 9 x 10 x 12 x 14 x 15	15.2	4.63	10.21	12	8.5	19.4	4.70	2.24	441	158	508	90.9	4.77	2.86	5.12	2.17	42.8	20.3	0.437
	17.1	5.21	11.49	12	6.0	21.8	4.77	2.30	502	181	579	104	4.79	2.88	5.15	2.18	49.1	23.5	0.439
	19.0	5.79	12.77	13	6.5	24.2	4.80	2.34	552	198	635	114	4.78	2.86	5.13	2.17	54.1	25.8	0.437
	22.4	6.83	15.05	12	8.5	28.6	4.88	2.41	642	228	738	132	4.74	2.83	5.08	2.15	63.4	30.1	0.435
	26.1	7.96	17.54	12	6.0	33.2	4.98	2.50	744	265	856	153	4.74	2.82	5.08	2.15	74.3	35.3	0.434
	27.7	8.44	18.61	12	8.5	35.2	5.01	2.53	781	276	897	161	4.71	2.80	5.04	2.14	78.2	37.0	0.431
200 x 100 x 10 x 12 x 14 x 15	23.0	7.01	15.46	15	4.8	29.4	6.95	2.03	1233	215	1309	138	6.48	2.70	6.68	2.17	94.5	27.0	0.264
	27.3	8.32	18.34	15	4.8	34.9	7.04	2.11	1454	252	1544	162	6.45	2.68	6.65	2.16	112	31.9	0.263
	31.6	9.63	21.23	15	7.5	40.3	7.12	2.18	1654	282	1755	182	6.41	2.65	6.60	2.12	128	36.1	0.261
	33.7	10.27	22.65	15	4.8	43.1	7.17	2.23	1772	303	1879	197	6.41	2.65	6.60	2.14	138	39.0	0.260
200 x 150 x 12 x 15 x 18	32.0	9.75	21.50	15	4.8	40.9	6.10	3.63	1667	813	2046	434	6.38	4.45	7.07	3.26	120	71.5	0.554
	39.6	12.07	26.61	15	4.8	50.6	6.22	3.75	2037	989	2496	530	6.34	4.42	7.02	3.23	148	87.9	0.552
	47.4	14.45	31.85	15	4.8	60.1	6.34	3.86	2390	1155	2923	622	6.30	4.38	6.97	3.22	175	104	0.549

Note: Calculated based on 1 kg = 2.2046 lb and 1m = 3.2808 Feet