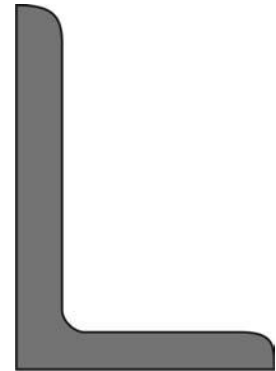


Unequal Angles



Designation	M kg/m	A cm ²	Dimensions				Position of Axis				Section Properties									
			a mm	b mm	t mm	R mm	C _x cm	C _y cm	C _u cm	C _v cm	Axis x-x			Axis y-y			Axis u-u		Axis v-v	
											I _x cm ⁴	r _x cm	z _x cm ³	I _y cm ⁴	r _y cm	Z _y cm ³	I _u cm ⁴	r _u cm	I _v cm ⁴	r _v cm
30x20x3	1.12	1.43	30	20	3	4	0.99	0.5	2.05	1.04	1.25	0.94	0.62	0.44	0.55	0.29	1.43	1	0.26	0.42
30x20x4	1.46	1.86	30	20	4	4	1.03	0.54	2.02	1.04	1.59	0.93	0.81	0.55	0.55	0.38	1.81	0.99	0.33	0.42
30x20x5	1.78	2.27	30	20	5	4	1.07	0.58	2	1.04	1.9	0.92	0.98	0.57	0.54	0.46	2.15	0.98	0.4	0.42
40x20x3	1.36	1.73	40	20	3	4	1.42	0.44	2.61	1.19	2.8	1.27	1.09	0.47	0.52	0.3	2.96	1.31	0.31	0.42
40x20x4	1.77	2.26	40	20	4	4	1.47	0.48	2.58	1.17	3.59	1.26	1.42	0.6	0.51	0.39	3.8	1.3	0.39	0.42
40x20x5	2.17	2.77	40	20	5	4	1.51	0.52	2.55	1.16	4.32	1.25	1.73	0.71	0.51	0.48	4.55	1.28	0.48	0.42
40x25x4	1.92	2.46	40	25	4	4	1.36	0.62	2.69	1.35	3.89	1.26	1.47	1.16	0.69	0.62	4.35	1.33	0.7	0.53
40x25x5	2.37	3.02	40	25	5	4	1.4	0.66	2.66	1.35	4.69	1.25	1.81	1.39	0.68	0.76	5.23	1.32	0.85	0.53
45x30x3	1.71	2.18	45	30	3	5	1.42	0.69	-	-	4.37	1.42	1.42	1.55	0.84	0.67	5.02	1.52	0.9	0.64
45x30x4	2.25	2.87	45	30	4	4.5	1.48	0.74	3.07	1.58	5.78	1.42	1.91	2.05	0.85	0.91	6.65	1.52	1.18	0.64
45x30x5	2.76	3.52	45	30	5	4	1.52	0.78	3.04	1.57	6.98	1.41	2.35	2.47	0.84	1.11	8	1.51	1.25	0.64
50x30x4	2.41	3.07	50	30	4	5	1.68	0.71	3.36	1.67	7.71	1.59	2.33	2.09	0.82	0.91	8.53	1.67	1.27	0.64
50x30x5	2.96	3.78	50	30	5	5	1.73	0.74	3.33	1.65	9.36	1.57	2.86	2.51	0.82	1.11	10.3	1.65	1.54	0.64
50x30x6	3.51	4.47	50	30	6	5	1.77	0.78	3.31	1.65	10.9	1.56	3.38	2.91	0.81	1.31	12	1.64	1.81	0.64
60x30x5	3.36	4.28	60	30	5	5	2.17	0.65	3.88	1.77	15.6	1.91	4.07	2.63	0.78	1.14	16.5	1.97	1.71	0.63
60x30x6	3.99	5.08	60	30	6	6	2.2	0.72	3.86	1.76	18.2	1.89	4.78	3.02	0.77	1.32	19.2	1.95	1.99	0.63
60x40x5	3.76	4.79	60	40	5	6	1.96	0.97	4.1	2.11	17.2	1.89	4.25	6.11	1.13	2.02	19.7	2.03	3.54	0.86
60x40x6	4.46	6.68	60	40	6	6	2	1.01	4.08	2.1	20.1	1.88	5.03	7.12	1.12	2.38	23.1	2.02	4.16	0.86
60x40x7	5.14	6.55	60	40	7	6	2.04	1.05	4.06	2.09	22.9	1.87	5.79	8.07	1.11	2.75	26.3	2	4.75	0.85
65x50x5	4.35	6.54	65	50	5	6	1.99	1.25	4.53	2.39	23.2	2.05	5.14	11.9	1.47	3.19	28.8	2.28	6.32	1.07
65x50x6	5.16	6.58	65	50	6	6	2.04	1.29	4.52	2.39	27.2	2.03	6.1	14	1.46	3.77	33.3	2.27	7.43	1.06
65x50x7	5.96	7.6	65	50	7	6	2.8	1.33	4.5	2.39	31.1	2.02	7.03	15.9	1.45	4.34	38.5	2.25	8.51	1.06

65x50x8	6.75	8.6	65	50	8	6	2.11	1.37	4.49	2.39	34.8	2.01	7.93	17.5	1.44	4.89	43	2.24	9.56	1.05
70x50x5	4.54	5.71	70	50	5	6	2.2	1.21	4.84	2.53	28.5	2.22	5.94	13.2	1.45	2.21	33.9	2.42	6.26	1.08
70x50x6	5.41	6.89	70	50	6	7	2.23	1.29	4.83	2.52	33.4	2.2	7.01	14.2	1.43	3.78	39.7	2.4	7.92	1.07
70x50x7	6.24	7.95	70	50	7	6	2.48	1.25	4.8	2.52	38.3	2.2	8.12	16.2	1.43	4.38	45.5	2.39	9.1	1.07
70x50x8	7.06	9	70	50	8	6	2.32	1.33	4.79	2.52	42.9	2.18	9.17	18.1	1.42	4.93	50.8	2.38	10.2	1.07
75x50x5	4.75	6.05	75	50	5	7	2.39	1.17	5.15	2.65	34.4	2.38	6.74	12.3	1.43	3.21	39.6	2.56	7.11	1.08
75x50x6	5.65	7.19	75	50	6	7	2.44	1.21	5.12	2.64	40.5	2.37	8.01	14.4	1.42	3.81	46.6	2.55	8.36	1.08
75x50x7	6.51	8.3	75	50	7	7	2.48	1.25	5.1	2.63	46.4	2.36	9.24	16.5	1.41	4.39	53.3	2.53	9.57	1.07
75x50x8	7.39	9.41	75	50	8	7	2.52	1.29	5.08	2.62	52	2.35	10.4	18.4	1.4	4.95	59.6	2.52	10.8	1.07
80x40x5	4.56	5.08	80	40	5	7	2.81	0.84	5.24	2.4	38.2	2.56	7.36	6.49	1.06	2.6	40.5	2.64	4.19	0.85
80x40x6	5.41	6.89	80	40	6	7	2.85	0.88	5.2	2.38	44.9	2.55	8.73	7.59	1.05	2.44	47.6	2.63	4.93	0.85
80x40x7	6.25	7.96	80	40	7	7	2.9	0.92	5.17	2.36	51.4	2.54	10.1	8.63	1.04	2.81	54.4	2.61	5.64	0.84
80x40x8	7.07	9.01	80	40	8	7	2.94	0.96	5.14	2.34	57.6	2.53	11.4	9.61	1.03	3.16	60.9	2.6	6.34	0.84
80x60x6	6.37	8.11	80	60	6	8	2.47	1.48	5.57	2.92	51.4	2.52	9.29	24.8	1.75	5.49	62.8	2.78	13.4	1.29
80x60x7	7.36	9.38	80	60	7	8	2.51	1.52	5.55	2.92	59	2.51	10.7	28.4	1.74		72	2.77	15.4	1.28
80x60x8	8.34	10.6	80	60	8	8	2.55	1.56	5.53	2.92	66.3	2.5	12.2	31.8	1.73	7.16	80.8	2.76	17.3	1.27
90x65x6	7.07	9.01	90	65	6	8	2.79	1.56	6.24	3.27	73.4	2.85	11.8	23.3	1.89	6.53	87.9	3.12	17.8	1.41
90x65x7	8.19	10.4	90	65	7	8	2.83	1.6	6.22	3.26	84.3	2.84	13.7	37	1.88	7.55	101	3.11	20.4	1.4
90x65x8	9.29	11.8	90	65	8	8	2.88	1.64	6.2	3.26	94.9	2.83	15.5	41.5	1.87	8.54	113	3.1	23	1.39
90x65x10	11.4	14.6	90	65	10	8	2.96	1.72	6.17	3.26	115	2.81	19	49.9	1.85	10.4	137	3.07	27.9	1.38
100x50x6	6.84	8.71	100	50	6	8	3.51	1.05	6.55	3	89.9	3.21	13.8	15.4	1.33	3.89	95.4	3.31	9.92	1.07
100x50x7	7.93	10.1	100	50	7	9	3.54	1.12	6.52	2.98	10.3	3.2	16	17.4	1.31	4.46	109	3.29	11.3	1.06
100x50x8	8.97	11.4	100	50	8	8	3.6	1.13	6.48	2.96	116	3.19	18.2	19.7	1.31	5.08	123	3.28	12.8	1.06
100x50x10	11.1	14.1	100	50	10	9	3.67	1.2	6.43	2.93	141	3.16	22.2	23.4	1.29	6.17	149	3.25	15.4	1.05
100x65x7	8.77	11.2	100	65	7	10	3.23	1.51	6.83	3.49	113	3.17	16.6	37.6	1.83	7.53	128	3.39	22	1.4
100x65x8	9.94	12.7	100	65	8	10	3.27	1.55	6.81	3.47	127	3.16	18.9	42.2	1.83	8.54	144	3.37	24.8	1.4
100x65x10	12.3	15.6	100	65	10	10	3.36	1.63	6.76	3.45	154	3.14	23.2	51	1.81	10.5	175	3.35	30.1	1.39
100x75x8	10.6	13.5	100	75	8	10	3.1	1.87	6.95	3.65	133	3.14	19.3	64.1	2.18	11.4	162	3.47	34.6	1.6
100x75x10	13	16.6	100	75	10	10	3.19	1.95	6.92	3.65	162	3.12	23.8	77.6	2.16	14	197	3.45	42.2	1.59
100x75x12	15.4	19.7	100	75	12	10	3.27	2.03	6.89	3.65	189	3.1	28	90.2	2.14	16.5	230	3.42	49.5	1.59
120x80x8	12.2	15.5	120	80	8	11	3.83	1.87	8.23	4.23	226	3.82	27.6	80.8	2.28	13.2	260	4.1	46.6	1.74
120x80x10	15	19.1	120	80	10	11	3.92	1.95	8.19	4.21	276	3.8	34.1	98.1	2.26	16.2	317	4.04	56.8	1.72
120x80x12	17.8	22.7	120	80	12	11	4	2.03	8.15	4.2	323	3.77	40.4	114	2.24	19.1	371	4.04	66.7	1.71
125x75x8	12.2	15.5	125	75	8	11	4.14	1.68	8.44	4.2	247	4	29.6	67.6	2.09	11.6	274	4.21	40.9	1.63
125x75x10	15	19.1	125	75	10	11	4.23	1.76	8.39	4.17	303	3.97	36.5	82.1	2.07	14.3	334	4.18	49.9	1.61
125x75x12	17.8	22.7	125	75	12	11	4.31	1.84	8.33	4.15	354	3.95	43.2	95.5	2.05	16.9	391	4.15	58.5	1.61
130x65x8	11.8	15.1	130	65	8	11	4.56	1.37	8.51	3.9	263	4.17	31.1	44.8	1.72	8.72	278	4.3	28.9	1.38
130x65x10	4.6	18.6	130	65	10	11	4.65	1.45	8.44	3.86	320	4.15	38.4	63	1.71	10.7	339	4.27	35.2	1.37
130x65x12	17.3	22.1	130	65	12	11	4.74	1.53	8.33	3.83	375	4.12	45.4	54.2	1.69	12.7	397	4.24	41.2	1.37
135x65x8	12.2	15.5	135	65	8	11	4.78	1.34	8.79	3.95	291	4.34	33.4	45.2	1.71	8.75	307	4.45	29.4	1.38
135x65x10	15	19.1	135	65	10	11	4.88	1.42	8.72	3.91	356	4.31	41.3	54.7	1.69	10.8	375	4.43	35.9	1.37
150x75x9	15.4	19.6	150	75	9	12	5.26	1.57	9.82	4.5	456	4.82	46.7	77.9	1.99	13.1	483	4.96	50.2	1.6
150x75x10	17	21.7	150	75	10	12	5.31	1.61	9.79	4.48	501	4.81	51.6	85.6	1.99	14.5	531	4.95	55.1	1.6

150x75x12	20.2	25.7	150	75	12	12	5.4	1.69	9.72	4.44	588	4.78	61.3	99.6	1.97	17.1	623	4.92	64.7	1.59
150x75x15	24.8	31.7	150	75	15	12	5.52	1.81	9.63	4.4	713	4.75	75.2	119	1.94	21	753	4.88	78.6	1.58
150x90x10	18.2	23.2	150	90	10	12	5	2.04	10.1	5.03	533	4.8	53.3	146	2.51	21	591	5.05	88.3	1.95
150x90x12	21.6	27.5	150	90	12	12	5.08	2.12	10.1	5	627	4.77	63.3	171	2.49	24.8	694	5.02	104	1.94
150x90x15	26.6	33.9	150	90	15	12	5.21	2.23	9.98	4.98	761	4.74	77.7	205	2.46	30.4	841	4.98	126	1.93
150x100x10	19	24.2	150	100	10	12	4.81	2.34	10.3	5.29	553	4.79	54.2	199	2.87	25.9	637	5.13	114	2.17
150x100x12	22.5	28.7	150	100	12	12	4.89	2.42	10.2	5.28	651	4.76	64.4	233	2.85	30.7	749	5.11	134	2.16
200x100x10	23	29.2	200	100	10	15	6.93	2.01	13.2	6.05	1220	6.46	93.2	210	2.68	26.3	1290	6.65	135	2.15
200x100x12	27.3	34.8	200	100	12	15	7.03	2.1	13.1	6	1440	6.43	111	247	2.67	31.3	1530	6.63	159	2.14
200x100x15	33.8	43	200	100	15	15	7.16	2.22	13	5.84	1758	6.4	137	299	2.64	38.5	1864	6.59	193	2.12
200x150x10	26.9	34.2	200	150	10	15	5.99	3.53	14	7.36	1400	6.38	99.6	680	4.46	59.2	1710	7.07	364	3.26
200x150x12	32	40.8	200	150	12	15	6.08	3.61	13.9	7.34	1650	6.36	119	803	4.44	70.5	2030	7.04	430	3.25
200x150x15	39.6	50.5	200	150	15	15	6.21	3.73	13.9	7.33	2022	6.33	147	979	4.4	86.9	2476	7	526	3.23
200x150x18	47.1	60	200	150	18	15	6.33	3.85	13.8	7.33	2380	6.29	174	1150	4.37	103	2900	6.96	618	3.21